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ABSTRACT

This collection includes 13 essays on various aspects of learning and elementary education. Individual essays describe, discuss, evaluate, or make recommendations about: (1) the urban school curriculum; (2) individually guided education; (3) in-service teacher education; (4) design of the science curriculum; (5) use of psychology in mathematics instruction; (6) reform in the reading curriculum; (7) the teaching of history in the social studies; (8) social studies learning activities; (9) provision for individual differences in the designing of the curriculum; (10) oral communication; (11) systematic teaching versus incidental learning; (12) the philosophy of education of Marva Collins; and (13) the grouping of pupils in the elementary school. (RH)

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ELEMENTARY EDUCATION AND THE LEARNER
(A Collection of Essays)

by

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THE URBAN SCHOOL CURRICULUM

Students in urban schools need to achieve in an optimal manner. Teachers and administrators need to develop a psychology of learning which assists each student to learn as much as possible. There are selected principles of learning when followed by teachers should guide urban students to attain as much as possible.

Principles of Learning and the Urban School

First of all, teachers should assist students to develop and/or maintain interest in ongoing lessons and units. All other things being equal, students learn more when interested, as compared to a lack of interest. Each teacher needs to develop strategies of teaching which capture learner interest in the curriculum. Urban school students differ from each other in terms of which activities generate interest.

To secure student interest, it behooves the urban school teacher to utilize a variety of kinds of learning opportunities. Reading materials (textbooks, library books, and encyclopedias, among other printed media), as well as audio-visual aids (laser video disks, video tapes, slides, filmstrips, and films) should be used as learning activities so that urban students attain objectives. The media selected as a learning opportunity must capture the interests of the urban school student.

Secondly, learners in urban schools need to attach meaning to ongoing learning experiences. If these students understand what has been taught, meaning in ongoing lessons and units is in evidence. That which has meaning to a student relates directly to his/her past experiences. Content taught should come within the experiences of urban students so that relationships of new subject matter acquired with that previously taught is in evidence. Meaningful experiences, not rote learning of new subject matter, must be in the offing for the urban student.

Thirdly, the urban school student needs to experience success in learning. New subject matter needs to be learned by each student. And yet, the subject matter is attainable. If the content in ongoing lessons and units is too easy, boredom and a lack of challenge may be in evidence. Toward the other end of the continuum, if the content to be learned is excessively complex, failure to achieve may well be an end result.

Fourthly, purpose in learning is highly important. If an urban learner perceives purpose, reasons for learning and achieving are in evidence. Purpose may be acquired by students in a deductive manner. The teacher explaining briefly to students the value(s) inherent in learning new subject matter makes content more palitable for acquisition. In addition to deductive means of assisting students to perceive purpose in learning, inductive procedures may also be utilized. Through induction, the teacher raises questions of learners to assist the latter through discovery to perceive the importance of attaining vital facts, concepts, and generalizations.

Fifthly, urban students need to experience balance among objectives. Thus, cognitive, affective, and psychomotor objectives need to be emphasized in ongoing lessons an units. One category of objectives is not adequate of the three. Cognitive objectives (creative and critical thinking, problem solving, as well as acquiring vitgal facts, concepts, and generalizations) are salient for learner achievement. School and society emphasize the importance of thinking skills to achieve optimally as fully functioning individuals. Affective ends advocate the importance of students having positive attitudes toward the self and toward others. Only then can cognitive objectives be achieved by students in an effective manner. Good attitudes also assist students to do well in the psychomotor dimension. Psychomotor growth emphasizes refined use of the gross and fine muscles, as well as attaining more optimally in manual dexterity. Urban students need to achieve well in cognitive, affective, and psychomotor domain objectives.

Utilizing principles of learning from research results in educational psychology should guide the teacher to help each student to achieve as much as possible.

The Philosophy of Education

Diverse philosophical schools of thought can do much to provide direction to urban teachers in selecting objectives, learning opportunities, and appraisal procedures.

Experimentalism, as one philosophy, emphasizes teachers guiding students in problem solving experiences. These problems should be life-like and real. What exists in society can provide excellent experiences in problem solving for students. With interest in problems selected, students should put forth effort in learning. Effort and interest become one and not separate entities.

Flexible, not absolute, steps of problem solving can be emphasized in ongoing lessons and units. These steps may include

1. selecting a problem from among alternatives.

2. gathering data from diverse reference sources to secure tentative solutions or answers.

3. developing a hypothesis directly covering the gathered data or information.

4. testing the hypothesis in a realistic, not artificial, situation.

5. revising the hypothesis, if evidence warrants.

Urban school students need to experience problem solving in the curriculum. Learners will realize that in school and in society, problems are identified and attempted solutions made.

Idealism, as a second philosophy for the urban teacher to emphasize, advocates students achieving well in an idea centered curriculum. Intellectual development becomes salient in idealism. The mind is real and mental achievement of students needs to predominate in school.

The learning of subject matter is significant in idealism. Vital concepts and generalizations need to be selected by the teacher for student achievement. Textbooks, workbooks, and other abstract reference materials should provide content for student acquisition. The teacher needs to be a true academic for students to be aided to achieve well. He/she serves as a model to help learners achieve well academically and intellectually. Abstract learning activities for students are prized more so than the concrete and the semi-concrete. However, concrete and semi-concrete activities should be brought into the curriculum as they guide students to learn more significant subject matter.

Urban school students need to achieve salient subject matter content and develop optimally in intellectual achievement.

Realism, as a third philosophy, emphasizes that one can know the real world as it truly is or exists. One then does not merely experience the real world as experimentalists emphasize, nor does the person only receive ideas pertaining to the actual natural and social world as idealistic believe. Rather, the carefully selected behaviorally stated objectives chosen by the urban teacher, among other individuals, and implemented in teaching-learning situations assist students to attain what is precise and measurable. The total number of objectives attained by students represents the scope of the curriculum. Sequence represents the order in which learners attain the objectives in the curriculum. Urban students need guidance to achieve as many specific objectives as individual abilities permit.

Existentialism, as a fourth philosophy, stresses students learning to choose and select on an individual basis. Decision-making becomes the number one goal. Life demands that to be human, each person must choose from among alternatives. If others make decisions for the self, one no longer is human, according to existentialism. The authentic self then makes decisions. Existentialists believe that life is ridiculous and absurd. However, within this environment, the human being chooses and selects, from among alternative options.

Urban students must have ample opportunities to make authentic selections. Among other methods of teaching, the following represent existentialist thinking:

1. a learning center approach. Here, students may sequentially select tasks to complete. There are adequate tasks so that each student may omit those not deemed beneficial. Time on task is highly important. An adequate number of tasks should deal with the human dilemma and condition. Values clarification then becomes important.
2. teacher-student planning of objectives, learning activities, and appraisal procedures. Heavy student input into curriculum development is important from an existentialist point of view.
3. contract systems. Each student plans learning opportunities with the teacher. These learning opportunities are placed on the contract. The student is heavily involved in terms of determining what he/she wishes to learn. The due date is written on the contract with attached student and teacher signature.

The learning centers approach, student-teacher planning of the curriculum, and the contract system emphasize a psychological, not logical organization of learning activities. Sequence resides within the student. Students order or sequence their very own experiences, resulting in a psychological curriculum.

Urban students need to be actively involved in ongoing lessons and units. Decision-making from among alternatives is the heart of the human condition.

In Closing

Urban students need to experience

1. interesting activities in the curriculum.

2. meaning in ongoing lessons and units.

3. success in attaining objectives in the school setting.

4. purpose or reasons for learning.

5. cognitive, affective, and psychomotor goals in teaching-learning situations. Attaining one category of goals is not adequate. Balance among objectives needs to be stressed.

Pertaining to the philosophy of education, students in urban schools need to

1. become proficient problem solvers in school and in society.
2. achieve dynamic, vital subject matter learnings in an idea centered curriculum.
3. attain relevant, not trivial, specific objectives in ongoing lessons and units.
4. develop proficiency in the decision making area.

INDIVIDUALLY GUIDED EDUCATION AND THE LEARNER

There are numerous recommended means of teaching pupils. Among others, Individually Guided Education (hereinafter called IGE), has definite advantages to offer in teaching-learning situations. The balance of this paper will elaborate on the pros and cons of IGE.

A Philosophy of Education

IGE emphasizes a definite philosophy of education. Thus, measurably stated objectives selected by the teacher are utilized in instructional situations. Teacher determined precise objectives might be compared with the utilization of general objectives in ongoing units of study. General objectives may be chosen by the teacher or developed with pupil involvement. Notice the following objectives:

1. The pupil will list in writing three causes of land pollution.
2. The pupil will write a fifty word paragraph on one approved method of soil conservation.

Each of the objectives states what pupils will be able to do after instruction. Results from pupils are observable if the chosen ends have or have not been attained. The teacher knows rather precisely what is to be taught and what pupils are to learn. Thus, carefully chosen learning experiences will assist pupils to list in writing at least three causes of land pollution (objection one above) and to write a fifty word paragraph, as a minimal level, on one approved method of conserving topsoil (objective two above).

The following are general objectives:

1. To develop within the pupil an inward desire in wanting to minimize land pollution.

2. To develop within the pupil an understanding of diverse appropriate means of soil conservation.

In objective number one above, vagueness exists in terms of how much of an inward desire to develop within pupils. The teacher then cannot measure to determine if the pupil has or has not achieved the general objective. In objective number two, clarity is lacking as to how much pupils should understand about methods of preventing soil erosion.

Advocates of IGE believe that

1. objectives need to be stated clearly and concisely. The teacher must know what is to be taught and what pupils are to learn. Otherwise, the teacher is wavering and lacks certainty as to what pupils are to accomplish in the curriculum.
2. objectives need to be sequentially arranged for pupils to achieve. A pupil may then progress at his/her own optimal rate in attaining each measurably stated goal. After instruction, the teacher can be rather certain pupils individually have/have not achieved each objective. The pupil must show observable results he/she can do what is stated in the objective.
3. pupils may select, from among alternatives, specific learning activities to achieve desired objectives. Audio-visual aids, as well as reading materials, may be chosen. The kinds of activities selected may well depend upon the involved pupil's interests, needs, and purposes.
4. after instruction, the teacher may measure if a pupil has/has not attained stated specific objectives.

Individually Guided Education may be implemented in the school/class setting using instructional aids and materials possessed presently by a school system.

However, an adequate number of materials and aids needs to be available in order that each pupil may attain measurably stated objectives.

Other Models of Instruction

There are numerous modifications of IGE which teachers, principals, and supervisors may wish to consider in improving the curriculum.

1. Teacher-pupil planning may be utilized to select desired objectives of instruction. Cooperatively, the chosen ends can be arranged sequentially. The teacher might then choose learning experiences for learners to attain the desired ends. After instruction, the teacher may evaluate if pupils have or have not attained the chosen objectives.
2. The teacher may determine precise ends for learner attainment. Teacher-pupil planning may be used to choose learning activities to achieve objectives. Ultimately, the teacher may evaluate if pupils have achieved the chosen objectives.
3. Teacher-pupil planning might be utilized to select specific objectives, learning activities to attain desired ends, and appraisal techniques.
4. The teacher may determine objectives and learning activities for pupils. Teacher-pupil planning might be utilized to appraise learner achievement.

In Conclusion

Teachers, principals, and supervisors need to study and analyze diverse means of improving the curriculum. Each method of teaching accepted must assist pupils to achieve optimally. It is relevant to reassess methods of

1. selecting goals in the curriculum.
2. choosing learning experiences to attain desired ends.
3. appraising learner progress.

INSERVICE EDUCATION: IN WHICH DIRECTION?

Frequent mention is made for the necessity of inservice education for teachers. Thus, workshops, faculty meetings, and peer coaching, among other approaches to inservice education, are elaborated up in professional educational journals, as well as in the news media. "There needs to be change in education", is a constant slogan. The lay public "does not want to pay for more of the same kind of teaching; they want reform".

A major problem arises pertaining to what is meant by reform in education. It is quite apparent that there are reforms (plural) and not reform (singular). Truth in terms of reform in education, resides within the beholder. Uniform concepts of reform do not exist. The balance of this paper will examine diverse philosophies as to what constitutes reform.

The Testing and Measurement Movement

Advocates of reform in education may stress the importance of students achieving at a higher level on tests. A student then is doing well if his/her test scores on criterion and/or norm referenced tests are going up. Workshops and faculty meetings are held in a school on ways that teachers can assist students to do better on tests. Students may then take one or more classes on how to take tests. One school may be compared against another school within a system as to which has higher student test scores. The state may issue a report card as to comparisons made on how well students in one school system achieve on administered tests as compared to others. New superintendents and principals have been hired to up student test scores within a school district. Test scores have risen dramatically in these situations.

The testing and measurement movement emphasizes

1. observable results from students in terms of higher scores on tests. What happens within the student, such as interests, feelings, and attitudes, is of little importance.

2. competition among students, schools, and school systems within a state. The feeling tends to be that competition alone, brings out the best from the students.

3. predetermined objectives for student attainment. These objectives may be developed on the state level, the district level such as instructional management systems (IMS), or by the teacher prior to instruction. The testing and measurement movement leaves little, if any leaway, for learner input into the curriculum.

4. measurement of student progress against the predetermined objectives. Emergent objectives or student-teacher planning has little or no value in the testing and measurement movement.

5. students achieving lower level cognitive objectives. Attitudes do not receive much emphasis. One reason for the lack of emphasis is the inherent difficulties in writing specific, measurable attitudinal objectives. Higher level cognitive objectives, such as critical and creative thinking, as well as problem solving create difficult situations when writing these kinds of ends in behavioral terms with indicators revealing minimal levels of attainment.

Testing and measurement philosophy merely represents one school of thought in terms of objectives, learning opportunities, and evaluation procedures in the curriculum. Other philosophies also need to be considered.

Problem Solving in the Curriculum

Problem solving is a process. Something happens within the individual as he/she engages in problem solving activities. The processes involved in problem solving are not measurable and cannot be tested. Several models can be given for flexible steps of problem solving. One model stresses the following criteria:

1. identifying and clarifying a problem.
2. gathering data or information from a variety of reference sources in attempts to solve the problem.
3. developing a hypothesis which reflects answers to the problem.
4. testing the hypothesis in a life-like situation.
5. revising the hypothesis, if necessary.

New problems can arise within the framework of any of the above named steps. Answers to problems are tentative and not absolutes. Thought and action are integrated, not separate entities. Thus, when problems are clarified and related data gathered, something is done with the results. That something involves testing the hypothesis in a life-like situation and receiving needed feedback to make possible modifications in future courses of action.

One can only experience, but not know the real world as it truly exists and is, in problem solving philosophies. Problem solving stress that students identify and solve real, life-like problems, as they exist in society. The school curriculum and society are one and not separate domains. The problems may also be simulated to provide for a miniature society in school.

Inservice education stressing problem solving is quite different from testing and measurement movements. The teacher emphasizing problem solving realizes that predetermined objectives for students to achieve do not advocate students identifying and attempting to solve realistic problems in society.

An Idea Centered Curriculum

An idea centered curriculum tends to emphasize mental development of students. The intellectual facet of a person's development is of utmost importance. Mind is real and needs to achieve optimally. Students then need to acquire vital subject matter. Reputable textbooks and other teaching materials used in the curriculum need to assist students to achieve worthwhile concepts and generalizations. Teaching materials need to focus on abstract content for learners to attain. The concrete and semi-concrete facets of learning are significant only to the degree that salient subject matter is acquired by students.

The teacher in an idea centered curriculum needs to be well trained and educated in the academic discipline taught. Teachers here need to select relevant subject matter objectives for students to achieve. Learning activities to achieve the chosen ends reflect the abstract so that students attain vital concepts and generalizations. Evaluation procedures need to ascertain how much students have learned and achieved in relationship to the stated objectives.

An idea centered curriculum emphasizes that

1. persons cannot know the natural and social environment as it truly is. Rather, one receives ideas of the real world only. Thus, a subject centered curriculum with its emphasis upon ideas needs to be stressed in teaching-learning situations.

2. generalizations and concepts must receive major emphasis in students learning subject mattter.

3. cultivation of the intellect should receive primary stress in the curriculum. Cognitive goals, rather than affective or psychomotor, should be predominant in teaching-learning situations.

4. textbooks, workbooks, and other abstract materials used as learning activities are more important as compared to the semi-concrete and concrete experiences.

5. inservice education for teachers should stress students achieving well in the cognitive or intellectual domain.

Looking to the Past for Direction

A look at what was relevant in the past and has survived in time and space may provide central themes for workshops and faculty meetings. The Great Books of the western world for secondary students and the Junior Great Books for elementary school pupils can provide objectives for student attainment. The works of these writers therein have stood the test of time (history) and place (geography).

Students need to have a challenging curriculum which emphasizes the great ideas of the past. The salient subject matter having stood the test of time and place becomes relevant for students. Content written in the present may not be important in the next few years. Much of what is written does not survive in significance. In a few years, the content is forgotten, never to be revived. Classical subject matter, however, remains important, regardless of place or time it was written. It takes durations of time to know if ideas written will survive. Thus, it is necessary to look to the past in terms of subject matter that great minds have thought. These salient ideas are as important now as they were in the past.

The Great Books advocates belief that

1. what is vital to learn is the same, yesterday, today, and in the future. These timeless ideas students need to achieve.

2. similar questions are raised by people, regardless of time and place. Classical content provides the necessary tools to understand society regardless of when or where the ideas were written.

3. subject matter written needs to be appraised by members in society as to its worth. It might take centuries to ascertain worthwhile content for student attainment. Thus, for example, The Republic by Plato (427-347 B.C.), Ethics and Politics by Aristotle (384-322) and The New Atlantis by Francis Bacon (1561-1626) are examples of the classics which have survived in time and place.

4. vital content needs to be learned by students. The enduring ideas are salient for students to acquire. The transitory and the insignificant need to be eliminated from the curriculum.

5. workshops and faculty meetings need to encourage teacher interest and motivation in the classics. Classical subject matter must receive heavy emphasis in teaching-learning situations.

Decision-Making Skills for Students

Life in society demands that individuals become proficient in making decisions. Choices, from among alternatives, are made. To become proficient in decision-making, opportunities to practice this art must be in evidence throughout the school day.

Student-teacher planning of objectives, learning opportunities, and appraisal procedures may well emphasize decision-making by learners. Individualized reading is a second procedure in emphasizing decision-making. Here the student selects sequential trade books to read. He/she also plans the method of appraising progress, after having read a trade book from the reading center. A third procedure in emphasizing student decision-making involves the utilization of learning centers. An adequate number of tasks must be available to students to emphasize time on task, as well as omitting those activities not deemed worthwhile. A third approach to stress in guiding student decision-making involves a contract system. The student with teacher guidance plans which learning opportunities should go into the contract. A due date for fulfilling the obligation in the contract are also established.

Decision-making philosophies stress the importance of

1. students making choices in the curriculum. Students need to develop feelings of commitment in choosing and making selections.

2. subjectivity being involved in developing choices. From among alternatives, the learner needs to make moral decisions.

3. learners developing their own essences or purposes in life. Goals are not given to the student, but must be sought and found.

4. life itself not being rational in and of itself. Rather, the absurd may be experienced. Certainty cannot be attained in the curriculum and in life.

5. input coming from students in the total life of the school and in society.

Inservice education approaches here must emphasize teachers and students being involved in selecting objectives, learning opportunities, and appraisal procedures.

In Closing

Selected philosophies or purposes in inservice education were discussed. These included

1. testing and measurement movements.
2. problem solving procedures.
3. idea centered approaches.
4. classical emphasis.
5. decision-making practices.

Each of the above is different from the others as to scope and sequence in inservice education goals and objectives. Frequently, advocates of inservice education talk and write about the need for change in education. Little is said of the direction of change. If change in a specific directions is mentioned, it advocates higher test scores for students being an ultimate end. Certainly, problem solving and decision-making skills are just as salient. Problem solving and decision-making are necessary presently as well as in the future in school and in society. Subject matter in an idea centered curriculum or a classical curriculum is significant, particularly, as they provide content in problem solving and decision-making. The testing and measurement movement is recommended if content on tests can be utilized in school and in society. In service education programs for teachers need to emphasize what is salient for students in the educational and societal arenas.

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DESIGNING THE SCIENCE CURRICULUM

Science teachers and supervisors need to develop quality scope and sequence in the curriculum. Scope emphasizes what will be taught in on going lessons and units. There are numerous means of determining the scope of the science curriculum.

Sequence stresses when objectives will be achieved by learners. Objectives should not be too complex for student realization. Nor, should these ends be too easy whereby challenge to learn is lacking. Goals need to emphasize that which is new and yet be achievable for students.

Scope in the Science Curriculum

What should students learn in science? Science teachers and supervisors must give careful consideration to the breadth of objectives to be emphasized in science. Thus, the scope of science lessons and units may be broader or narrower in scope. Quality and relevance are two concepts to emphasize in ascertaining the scope of the science curriculum.

One means in determining scope is to emphasize mastery learning or instructional management systems (IMS) of instruction. Managing the curriculum is important to emphasize here. Measurably stated objectives need to be chosen by professionals in science education, prior to their implementation in the curriculum. With these precise ends, it is possible to measure if a student has/has not attained a precise objective as a result of teaching or instruction.

Science teachers and supervisors determine the objectives prior to instruction. There is no student-teacher planning in selecting the chosen ends. Specificity is salient in writing measurably stated objectives. Ideally, the ends should be written in ascending order of complexity. Objectives not achieved require a revised teaching strategy. This is followed by another assessment to determine if the measurably stated objective has been achieved.

The total number of objectives selected for student mastery emphasizes the scope of the science curriculum.

Sequence is in evidence when teachers and supervisors arrange the objectives for each of the grade levels in the school system. Students need to possess readiness or have readiness developed prior to working on any one of the sequentially arranged objectives. In selected school systems, a student needs to master a certain number of objectives prior to being promoted to the next grade level.

A second means of determining scope in the science curriculum pertains the use of the project method. The project method can emphasize individual endeavors or committee work. Project methods are predicated on the philosophy of the student being heavily involved in decision making. The teacher is a guide and advisor to the student, but does not determine the project to be made.

There are flexible steps to pursue in the project method. First of all, the student must have a purpose or goal in mind to pursue a project. The science teacher may need to clarify the purpose with the involved student. The student needs to have a clear perception of what is to be achieved in the chosen project.

Secondly, after the purpose of the project has been clarified, the student needs to make definite plans on how the activity is to be pursued. The plan must be developed sequentially. Carefully developed plans are important.

Thirdly, after the plans have been made and are acceptable, the student may construct or carry out each step in the plan. Quality work needs to be in evidence in carrying out the plans. Responsible students need to reveal excellent work in the actual making of the project.

Fourthly, the project needs to be carefully evaluated in terms of standards. Self-evaluation by the involved learner is important. The science teacher is a guide to aid in appraising the project.

The project method emphasizes heavy student involvement in developing a purpose, a plan, the actual implementation of the plan, and the appraisal of the completed project. The science teacher is a stimulator, a challenger, a resource person, a guide, and a helper to assist student achievement.

The total number of planned and completed projects represents the scope of the science curriculum.

A third means in determining the scope of the science curriculum advocates humanism as a psychology of learning. Humanists believe that students individually should choose and make decisions in terms of what to learn. Learning centers stress humanism as a psychology of learning. Thus, an adequate number of tasks and centers need to be in evidence in a classroom. The tasks and centers are developed by the science teacher. However, an open ended curriculum is in evidence in that the student may plan with the science teacher those activities purposeful to the former.

With an appropriate number of centers, a student may select desired experiences and omit those activities as deemed to be lacking purpose. A humane science curriculum is in evidence if students can make choices as to sequential tasks to pursue. Tasks need to be varied to provide for students of diverse ability and interest levels. A major goal of humanism it to have students become proficient decision makers in pursuing purposeful experiences. Concrete, semi-concrete, and abstract activities need to be in the offing for each student at each learning center.

Humanists believe that each person attempts to achieve self-actualization. The student then selects, pursues, and completes tasks to realize the optimal self. Humanism does not believe that the teacher can select objectives, learning activities, and appraisal procedures to aid learners to attain optimally. Rather, the student perceives interest, purpose, and reason in ongoing self-selected activities.

The total number of tasks completed at the learning centers represents the scope of the science curriculum.

A fourth method in determining scope reflects a problem solving philosophy. From a rich, stimulating environment, students identify problems. The problems ideally should come from learners. However, a student may accept an identified problem from the science teacher. Students in committees need to solve the problem. In society, problems are identified and solved by citizens. The classroom should represent a miniature society. Thus, school and the science curriculum is not separated from the real world in society.

There are flexible steps to utilize in problem solving. The very first step is to select and delimit the problem. After the problem has been chosen, data needs to be gathered. The data may come for experiments and demonstrations in science, reading materials, as well as diverse audio-visual materials and aids. Effort in problem solving endeavors comes from the interests of students. Effort and interest are one and not separate entities.

Next a hypothesis needs to be developed directly related to the problem. Data sources provide content for the hypothesis. Hypotheses are never absolutes but are tentative. Thus, a hypothesis needs to be tested. If the hypothesis holds up under testing, it is accepted. If not, the hypothesis may be modified or refuted. If refuted, additional data needs to be acquired to achieve a comprehensive hypothesis.

The total number of problems identified and solved represents the scope of the science curriculum.

Sequence in the Science Curriculum

Science teachers and supervisors need to evaluate continuously the quality of sequential learnings for students. Inappropriate sequence can make for failure for students when pursuing on going learning activities. Optimal learner progress is in evidence if students are able to achieve new challenging objectives without harmful side effects.

IMS emphasizes the arrangement of precise, measurably stated objectives in ascending order of complexity. Each preceding objective and its attainment provides readiness for students pursuing the next ordered objective. Success, according to behaviorists, in learning is due to ordering the objectives so that students will experience minimal failure in learning. An additional objective can be inserted when students experience failure between two precise ends. A logical curriculum is in evidence when the science teacher and supervisor sequence learnings for students.

Project method advocates believe that students with teacher guidance will have a purpose, plan, implementation of the plan, and evaluation procedures which harmonizes with the learner's present level of development. A student generally doesn't implement that which is incomprehensible and lacks meaning. Since the student is heavily involved in choosing projects to complete in science, he/she selects what is feasible and sequential. Sequence resides within the student and not within the minds of teachers and supervisors selecting sequential science objectives for the former to achieve.

A psychological curriculum is in evidence when stressing sequential learnings for students in the project method.

Humanism, as a psychology of learning, also emphasizes a psychological science curriculum. The student, from among alternatives, selects sequential tasks to pursue. Sequence here resides within the student since he/she makes choices and decisions as to which tasks to pursue in a selected order.

A psychological curriculum in science is also in evidence with problem solving methods. Problems are selected by the student with teacher guidance. The problems, as well as flexible sequential steps in their solving, come from the student, not from the science teacher. The science teacher, however , provides stimulating, readiness experiences for students.

Teachers need to guide students to attain optimally in science whether it be a logical and/or a psychological curriculum.

In Summary

A defensible science curriculum emphasizes:

1. A justifiable scope of content and skills for students to attain.
2. Meaningful, interesting, as well as purposeful goals for learners to attain.
3. A sequence which assists students to attain as much as possible.

Psychology in Teaching Mathematics

Numerous reputable psychologies are provided to assist mathematics teachers to guide each student to achieve optimally. The teacher of mathematics should study the diverse psychologies of education to implement the best teaching strategy possible. The lay public focuses on student achievement in the 3 r´s or basics. Mathematics represents a highly salient basic. Students need to achieve well in mathematics to do well in school and in society. The societal arena demands mathematics proficiency within students. Learners in school need guidance to fulfill those responsibilities. Teachers need to select objectives, learning opportunities and appraisal procedures which assist each learner to achieve as well as is possible.

The balance of this paper will emphasize specific psychologies of education, applicable to teaching-learning situations in the classroom.

Behaviorism in the Mathematics Curriculum

Precise, measurably stated objectives and their use is the heart of behaviorism. These objectives are selected prior to their being implemented in the classroom. Generally, no student participation has been emphasized in selecting these goals. Behaviorism can be emphasized with state mandated objectives in terms of core competencies and key skills. On the state level, precise measurably stated objectives have been chosen. The department of education of each state selects a cross section of educators within their borders to agree upon the stated ends. The mathematics teacher then plans learning opportunities to have students attain each objective.

A second example of behaviorism emphasizes instructional management systems (IMS) on the district level. The central office then selects a cross section of teachers within the district to select salient objectives in mathematics. Again, the classroom teacher must emphasize each objective in teaching-learning situations.

The mathematics teacher, without stated mandated objectives or IMS, may write and implement specific ends for student attainment. Teaching strategies need selecting which insures that students attain desired ends.

An early pioneer in measurably stated objectives and their use was B. F. Skinner (1904-). Dr. Skinner emphasized programmed learning in either textbook or software form. The ingredients of programmed learning include:

1. sequential items of small amounts of information acquired by students in each step of learning.

2. students responding to a test item, such as a multiple choice item, based on information presented in book or software form.
3. learners receiving feedback based on the response made.
4. reinforcement being rather common with high frequency of correct responses made.

Behaviorism, in its diverse manifestations, emphasizes that a student either does or does not achieve an objective as a result of instruction. If an end is not attained, the mathematics teacher needs to try a different teaching strategy.

Behaviorism appears to be a dominant psychology of education emphasized in the teaching of mathematics. With the popularity of behaviorism, the writer recommends:

1. each objective in mathematics be carefully selected in terms of being useful in school, as well as in society.
2. students achieving success in attaining sequential objectives.
3. a variety of challenging learning opportunities being provided for learners to attain each end.
4. students experiencing meaning, interest, and purpose in achieving desired ends.
5. critical and creative thinking, as well as problem solving, receiving ample attention in the mathematics curriculum.
6. appraisal procedures being varied, valid, and reliable to

evaluate learner progress.

Humanism in the Mathematics Curriculum

Humanism, as a psychology of learning, emphasizes students being heavily involved in determining objectives, learning opportunities and evaluation procedures. Each student is guided to attain self realization. The late A. H. Maslow, humanist psychologist, listed five sequential levels for individuals to move through to achieve realization of the self. These include

(a) assisting students to meet physiological needs, such as adequate food, clothing, and proper shelter.
(b) helping learners to feel safe and secure in their environment.
(c) guiding students in meeting love and belonging needs.
(d) developing situations in which esteem needs of students are being met.
(e) assisting learners to achieve self actualization.

Only after the above sequential needs of students have been met can students achieve optimally, according to humanism, as a psychology of learning. It certainly behooves any school system to meet needs of students in order that increased achievement can be in the offing.

To pinpoint the mathematics curriculum more thoroughly, input from learners in selecting objectives, learning opportunities, and appraisal procedures is highly important. There are several excellent ways of emphasizing humanism in the mathematics curriculum. One plan is to utilize learning centers. More tasks than any one student can complete would be at the diverse centers. Students individually learn to make decisions. They choose which tasks sequentially to complete and which to omit. Each learner then selects what is perceived to be of interest, meaning, and purpose. Students do not need to work on tasks perceived to be of little or no value. Sequence, in selecting ordered tasks, resides within the student. A psychological curriculum is then in evidence. Internally, the student makes choices in terms of tasks in mathematics to pursue.

A second plan of humanism, as a psychology of education, is to use a contract system. In a contract, the student and his/her teacher plan cooperatively specific learning opportunities for the former to complete. There must be considerable input from the student on the contract for humanistic psychology to be in evidence. The date the contract is due must be indicated together with the student and the teacher's signature.

A third plan of humanism is in the offing when the teacher lists, for example, ten activities for students to consider to complete in mathematics. Each student may choose five or more to complete. The student here has input as to what to pursue and what to omit.

Humanism emphasizes a humane mathematics curriculum. Humanness is defined as students being able to decide from among alternatives which learning activities possess value and need to be completed satisfactorily.

The writer, in evaluating humanism, in teaching mathematics recommends that

1. worthwhile tasks be developed for students to pursue sequentially. Trivia is to be omitted for learners to pursue.
2. students be guided to stay on task and not digress from achieving relevant objectives.
3. tasks be written on diverse levels of achievement to challenge each student to achieve as much as possible.

The Structure of Knowledge

During the 1960's and early 1970's much emphasis was placed upon mathematicians on the higher education level identifying structural ideas for public school students to attain. The structure of knowledge emphasized underlying principles that provided a framework for an academic discipline. Thus, in the academic discipline of mathematics, selected broad generalizations provided a structure for students in ongoing lessons and units. The key ideas then, among others, included the commutative property of addition and multiplication, the distributive property of multiplication over addition, the property of closure, and the identity elements.

The structure of knowledge approach, as identified by Jerome Bruner of Harvard University and his associates emphasized that public school students utilize methods of learning utilized by mathematicians on the higher education level. An inductive procedure is then in evidence. Students are guided by the teacher to learn by discovery in moving from the specific to the general to achieve structural ideas. Materials to use in teaching students to acquire content inductively include inactive (manipulative items), iconic (pictures, drawings, slides and filmstrips emphasizing main ideas), and symbolic (abstract content such as printed words and numerals).

The structure of knowledge approach has much to recommend itself. The writer recommends that

1. teachers emphasize structural ideas in a spiral curriculum. However, the spiral curriculum should not be excessively repetitious. There is built in review in the structure when these key generalizations receive attention at more complex

levels in the mathematics curriculum.

2. induction receive adequate attention in teaching-learning situations. However, continued use of inductive methods are time consuming to use. The mathematics teacher needs to inject meaningful explanations also at definite points in ongoing lessons and units.
3. creative teaching in using diverse methodologies be emphasized thoroughly. Methods and subject matter have to be adjusted to the present achievement level of each student. Students differ from each other in many ways, such as interests, purposes, and present levels of achievement.

Diagnosis in Mathematics

The mathematics teacher must utilize the concept of diagnosis in teaching-learning situations. To diagnose means to pinpoint specific difficulties students experience in computation, concept development, and problem solving. Students need assistance to overcome errors made.

Robert Gagné in his book The Conditions of Learning (New York: Holt Rinehart and Winston publishers, 1985) advocates a hierarchy of objectives be stated in measurable terms for student attainment. If a learner cannot achieve a specific end, the teacher needs to move to a sequential easier objective. Reversing to easier ends is necessary until the present attainment level of the involved student is found. The last three levels of Gagné's hierarchy are especially important to know when teachers diagnose difficulties students experience in mathematics. The three in sequence are concept learning, rule learning, and problem solving. Thus, if a student cannot solve a problem in mathematics, the teacher needs to assist the former to determine if he/she understands involved rules. For example, if the problem to be solved involves finding the volume of a cylinder, the student must understand the involved formula - $r^2\pi h$. If the learner does not understand the rule to determine the volume of a cylinder, he/she needs assistance in attaching meaning to concepts. The separate concepts are radius, radius times radius, pi, and height. After the concepts have been learned, followed by the student acquiring the rule, the chances are that the problem can be solved in finding the volume of a cylinder.

Diagnosis is involved when the mathematics teacher assists the student to pinpoint specific weaknesses in a lesson or unit. Assistance and guidance needs to be provided to the learner to overcome identified deficiencies. Robert Gagné provides a quality model for mathematics teachers to follow in helping learners to progress sequentially. The diagnosis and remediation concepts in

Gagne´s hierarchy of objectives can give much help to teachers in guiding each student to attain as much as possible in mathematics.

In using diagnostic-remediation procedures in the teaching of mathematics, the writer recommends that

1. students attach meaning to each sequential step of learning.
2. learners be assisted to perceive holism and sequence in subject matter learned. Diagnosis is available if a student fails to attach meaning to ongoing rules (generalizations) and concepts in order to solve problems in mathematics.

In Conclusion

Relevant principles of learning from the psychology of education need to be implemented in teaching-learning situations. The teacher of mathematics must assist each student to attain in an optimal manner.

Four schools of thought were discussed in the psychology of education. These were behaviorism, humanism, the structure of knowledge and diagnosis based on a hierarchy of objectives.

The writer recommends that mathematics teachers

1. implement tenets of behaviorism with its measurably stated objectives. Higher levels of cognition must not be hindered with the use of behaviorism in teaching-learning situations.
2. provide ample opportunities for students to engage in decision

making. Learners need to have chances to select sequential learning opportunities, as advocated by humanism.

3. stress the structure of knowledge so that students may perceive that subject matter is related.
4. adequately diagnose and remediate student problems in lessons and units. Students need to perceive mathematics as being holistic and not isolated specifics in diagnostic/remediation situations.

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Reform in the Reading Curriculum

Complaints are heard regularly pertaining to the number of illiterate people in society. Rather high percentages are given for individuals who cannot read. A twenty to twenty-five per cent figure is frequently given in news reports. The exact per cent will never be known. What constitutes an illiterate person in definition is a further point of debate. Illiteracy will come on a continuum, rather than as given absolute per cents.

There are people in society who, no doubt, fail to learn to read regardless of procedures, subject matter, and methodology. These individuals may even possess, seemingly, the capacity intellectually to learn to read. Those of inadequate capacities would need to be excluded from specific persons who have not learned to read when using per cents in the illiterate segment of the population. Even then, it is difficult to determine who lacks capacity in learning to read. All persons need to achieve as much as possible in the reading curriculum.

In this paper, the writer will zero in on issues and remediation procedures to improve the reading curriculum.

The Great Debate in the Teaching of Reading

A discussion of diverse procedures in the teaching of reading will need to occur. Presently, most states have identified core competencies and key skills for classroom teachers to emphasize in reading instruction. Local teacher involvement is greatly minimized or nonexistent in selecting the state mandated objectives. It is believed that at the state level, a better job of selecting goals can be in evidence, as compared to teacher decision-making on the local level.

The district level may also identify numerous specific objectives for students to attain in reading. These become known as instructional management systems (IMS) or mastery learning. With IMS or mastery learning, as well as stated mandated objectives, each skill is clearly identified and stated in measurable terms. Either the learner has or has not achieved the skill as a result of teaching. The assumption to back the utilization of measurably stated objectives include:

1. reading skills to become good readers can be identified.
2. each skill can be stated in measurable terms, including an indicator to emphasize minimal levels of achievement.
3. students need to be tested frequently to insure mastery of each specific skill.
4. the end result will be improved reading instruction for each student.
5. all students can become literate individuals.

Too frequently, however, with the use of measurably stated objectives, the reading curriculum becomes fragmented. Isolated skills are taught and measured. Much time is spent on testing to determine if the skills have been acquired by students. Additional time is spent by the teacher on recording the test results of each learner.

Reading skills then are taught and tested frequently. Time spent on the actual act of reading is greatly minimized. Learning of isolated skills, like phonics, does not involve the totality or gestalt of reading. Time spent on testing and recording of test results affects the time teachers spend on teaching reading and having students engage in reading content.

To minimize the dilemma of identifying core competencies and key skills, a great debate in the teaching of reading needs to occur. The debate should center around meeting individual needs of students in reading. These discussions should emphasize tenets and modifications of diverse philosophies in the teaching of reading. Which philosophies then should be emphasized?

Individualized reading has much to offer. A very minimal amount of time is spent in teaching specific skills. Reading is a more holistic enterprize, as compared to identifying and teaching each highly specific skill. In individualized reading, the entire time, as a whole, is spent on the actual act of securing ideas when learning to read. The student selects which library books to read sequentially. A wide variety of books on interesting topics needs to be in the offing. These books also should be on a variety of reading levels to provide for the present achievement level of each student. The teacher is a guide and stimulater to challenge students individually to consume more reading materials. He/she has conferences with students on a one on one basis after a library book has been completed. A student may receive assistance on a specific skill, as identified in the conference. Otherwise in the conference, the teacher discusses subject matter that a pupil has read. The student can reveal the quality of reading by selecting content from the library book to read orally to the teacher.

A second holistic procedure to emphasize in teaching reading is the language experience approach. This method of teaching reading can be utilized on all age levels. For young students who do not have a writing vocabulary, the classroom teacher may print the ideas as presented by the former. To secure content, learners need to experience subject matter from audio-visual aids or from a story read to them. After these experiences, young learners present related subject matter to the teacher who in return prints these ideas in neat manuscript letters on the chalkboard. The teacher reads the content on the chalkboard with the involved pupils by pointing to the words and phrases. It does not take long before pupils begin to recognize words and phrases as the content is read with teacher guidance. At any age or grade level, when students have developed their own writing vocabularies, they may write up their own experiences from ongoing lessons and units of instruction. Reading and writing are then correlated, not isolated entities.

A third holistic procedure in learning to read involves the use of basal readers. A minimal amount of time should then be spent on analyzing words, such as the use of phonics, syllabication, and structural analysis. Students must be guided to read sequential stories from the basal reader. The emphasis must be based on reading subject matter, rather than stressing analytic word attack skills.

Why are holistic procedures in the teaching of reading emphasized? Students can hurdle many problems in word recognition if interesting content is being read. Advocates of individualized reading tend to believe that analytic methods of instruction deemphasize interest in students wanting to learn to read. Interest, however, is a powerful factor in learning.

Secondly, if students are to learn to read, they must read and not spend excessive time analyzing words. Reading involves securing meaning from words, phrases, sentences, and paragraphs.

Purpose in reading comes from perceiving reasons for learning. Reading fascinating and challenging content provides sequence in learning. Isolated behaviors, such as achieving measurable reading skills, lacks purpose on the part of students.

Research versus Philosophy in Teaching Reading

Presently, the emphasis in education is to base methods and procedures of teaching in reading upon research results. Research must be emphasized continually to secure data on which methods to use and not use in reading instruction. However, there are many weaknesses in research procedures used in reading. Frequently, with research findings, the following erroneous methods are emphasized:

a professor summarizes research studies in reading and develops selected conclusions, such as all pupils need to have daily, sequential lessons in phonics. The research studies used to develop conclusions may be poorly done indeed. Random sampling procedures for the experimental and control groups are not in evidence. Or, the experimental and control groups were not equated, if randomization was not possible. Other weaknesses in research studies include a lack of adequate numbers used in the study for both the experimental and the control group. Further weaknesses of research include

1. no controls on who teaches the experimental versus the control group.
2. low validity and reliability of measurement instruments used in the study.
3. a lack of utilitarian values of the completed research. External validity then goes downhill.

Truly bad research has been printed in leading scholarly journals Examples of deficient research are the following:

1. during the 1960's, two studies received much recognition which concluded that schools had very little affect, if any, on student

achievement. One would not need to do a research study to indicate that schools, as well as other institutions, do influence students. If students are in school 180 days in one calendar year which includes a six hour daily schedule of curriculum and cocurriculum activities, a vacuum does not occur in terms of learners learning something. Here, bad studies were made that tried to prove what the researchers wanted to prove.

A second bad study, among others, was made in the early 1980's which had to do with class size. The researchers concluded that class size had nothing to do with student achievement. One may then conclude that a classroom teacher could teach 100 students in a room without sacrificing student achievement. That is a ridiculous conclusion indeed. All things being equal, adding another student to a classroom makes for an additional student for the classroom teacher to provide for. The only exception might be that an additional motivated student could stimulate others to achieve more optimally in the classroom setting. However, one needs to be careful in adding one more motivated student in a classroom, especially if thirty learners are in the class setting already. One need do no research to indicate that a fifteen to twenty student ratio per teacher is adequate in number. When non-academic students and/or disrupters exist in a classroom, the ratio needs to be lowered.

A third bad method of reporting research is to say "Our data indicate ____." These reporters fail to say where they received their information. They do not mention how many responses were made in the data collected, nor the percent of return. Nothing is said about any controls implemented in the study. Sophisticated writing of these published manuscripts is in evidence. Mixed into the context is "Our data show ____."

A fourth defective type of study exists when school administrators in their "research" indicate that "teachers really do not want higher salaries. What they really want is to receive recognition for good teaching." To be sure, good teachers do want these non-monetary rewards, but they also need higher salaries in order to stay on as quality classroom teachers and live a lifestyle commensurate with a college/university graduate.

Research in education then has not, by any means, answered problems pertaining to increased achievement on the part of students. Those research results that emphasize raising student test scores only, fail to realize the importance of students using what has been learned and applying these ideas in the real world of society. Personal and social development of students are also lacking when raising test scores becomes the ultimate goal of teaching.

An additional problem of raising test scores pertains to how this is done. The writer has visited schools where teachers teach directly to a standardized achievement test. The test is directly in front of the classroom teacher to teach for. A few articles have been published whereby superintendents were hired in a district to raise test scores of students and thus improve the curriculum. As can be expected, the test scores of students increased lavishly. This, no doubt, will always happen in a like situation.

Teachers and administrators must not give up on conducting and using research results. However, the status of present day research leaves much to be desired indeed. Critical evaluation of published research is important.

Educators might also look toward a study of philosophy to determine goals, learning opportunities, and appraisal procedures.

The Great Debate in education of the past can provide valuable input into curriculum improvement. William Chandler Bagley (1874-1946) advocated students mastering the essentials. In his The Essentialist Manifesto, published in 1938, Dr. Bagley believed that a core of knowledge exists which all should master. In the reading curriculum then, the same essential learnings would be required of all students. Interest in learning would not necessarily be an important criterion to follow in teaching, according to Dr. Bagley. Rather, the students need to will to learn. The learner must reach out and learn regardless of the amount of interest inherent in the reading curriculum.

John Dewey (1859-1952) in his book Democracy and Education advocates interest as a powerful factor to create effort in learning.

The goals of the student make for interest and effort.

Subject matter is not an end in and of itself. But, it is a means or instrumental to an end, according to Dr. Dewey. In the reading curriculum, students read to secure subject matter to solve problems. The problems must be realistic and life-like. School and society should not be separated from each other. Students might work in committees to gather data from reading, and other activities, to solve problems. John Dewey did not believe that common learnings, or essentials, existed which all students should learn. Rather, problems are unique to the student and the committee. Committees are utilized in society to solve problems. Therefore, the school curriculum needs to emphasize committee work and problem solving.

B. F. Skinner represents the philosophical school of thought of realism. With programmed learning, sequential steps for students to learn are written by the programmer. There is no input into the curriculum from students. Each sequential step of learning is measurable. Either a student has or has not responded correctly to a programmed item.

Realists believe that one can know in whole or in part the real world as it truly is. The reality of the real world in its specifics is identified in terms of behaviorally stated objectives.

In the reading curriculum, precise objectives can be identified according to realists. The chosen objectives can become a part of the instructional management system (IMS) or state mandated core competencies and key skills. IMS and programmed learning emphasize measurably stated word recognition and comprehension skills.

Idealism, as a philosophy of education, emphasizes an idea centered curriculum. Idealists believe one can only know ideas and not know the real world as it truly is. With a reading curriculum emphasizing ideas, students need to do much reading to receive abstract learnings. Audio-visual aids would be used minimally, unless these materials assist students to secure concepts and generalizations in the abstract. The reading textbook, workbook, and worksheets provide major learnings for students. A variety of purposes or comprehension skills need to be taught students so that worthwhile subject matter can be learned. Word recognition skills are important as they assist students to secure abstract content.

Existentialism, as a fifth philosophy of education, emphasizes the individual student making choices and decisions, from among alternatives. To emphasize existentialist thinking, the teacher could have a variety of reading materials at a station. Means of interesting students in the diverse kinds of books and pamphlets should be in evidence, such as appealing bulletin board displays, as well as the teacher introducing selected materials to whet students' appetites for reading.

The sky would be the limit in terms of the numbers of materials read, as well as the complexity of each. Decisions are up to the student. The latter may also determine the methods of appraisal to assess what any one reader got out of the reading materials in terms of comprehension.

Existentialists believe strongly in knowledge being subjective, not objective. The contents of the reading materials be it biographical, autobiographical, the fine arts, historical, geographical, scientific, among others, should assist students to look at and clarify values. To an existentialist, life consists of choosing from among alternatives in an absurb environment. To be human is to make choices in life. If others make decisions for the self, the latter ceases to be human.

The teacher must be a guide and a stimulator to students. He/she must help learners to make decisions, but not make choices for students.

A study of philosophy may well provide teachers with an excellent basis in making decisions in the reading curriculum. The Great Debate in reading might then center itself around

1. identifying the basics or essentials, as essentialists recommend. These core learnings would be common to all students. The essentials must be identified carefully. Research results can be brought into the identification process. The research could include a basic list of updated words that all students should master in reading for each

grade level. However, individual differences must be provided for among slow, average, and fast learners. Each student must achieve optimally.

2. using problem solving approaches, as experimentalists advocate. Problem solving stresses students reading subject matter to answer questions and securing solutions to problems.
3. identifying vital precise objectives for students to attain, as advocated by realists. Critical and creative thinking must not be minimized in the process.
4. gleaning worthwhile generalizations in reading in an idea centered curriculum, as emphasized by idealists.
5. attempting to clarify values within dilemma situations, as stressed by existentialists.

The Psychology of Learning

How can each student be assisted to achieve as much as possible in reading? This is a problem for educational psychology to assist in solving. Psychologists would tend to agree on selected broad guidelines in teaching students. These guidelines can be applied to the teaching of reading.

To assist students to achieve optimally in reading, he/she needs to be involved in choosing reading materials which possess personal interest. When objectives for students to attain are identified external to the learner, a lack of interest in reading may be an end result. The student needs to have more control over the reading curriculum. The objectives, learning opportunities, and appraisal procedures should not be handed down, solely or in large part, from the state level, such as in state mandated goals. Neither should IMS procedures of teaching be handed down from the district level to the classroom level. Rather, intrinsic motivation is important in developing the reading curriculum. Being involved in choosing materials to read is important to learners. If students have a desire to read self-chosen materials, intrinsic motivation is then involved. From within, the learner then wants to read. The teacher is a guide and stimulator.

Sequence resides within the student. It does not reside within state mandated objectives or IMS. The student then needs to select stimulating, challenging reading materials. A wide variety of topics based on diverse levels of reading achievement is necessary. Students individually may then select which subject matter to read. The learner selects reading materials based on intrinsic interests. He/she chooses content based on personal interests, needs, and purposes. Intrinsic motivation is then in evidence. Sequentially, the student selects subject matter to read.

Extrinsic motivation procedures in reading should be utilized if intrinsic procedures do not work. Primary (the actual prizes) and secondary reinforcers (tokens to be exchanged for prizes) may be used to encourage reading. Standards for receiving the reinforcers should be announced to students so the latter may be motivated to increase the amount and quality of reading materials consumed. The rewards are extrinsic to the actual act of reading. However, they do serve as reinforcers for students to do more reading and on a variety of topics.

There are general criteria for teachers to follow in teaching which all educational psychologists agree with. First of all, students should attach meaning to subject matter read. If learners do not understand what has been read, frustration tends to set in. Meaning theory in learning emphasizes students comprehend content while reading. A lack of meaning in understanding subject matter truly wastes the time of students, as well as of the classroom teacher in teaching-learning situations.

Secondly, learners need to perceive purpose or reasons for learning. If students do not perceive the value of reading, no doubt, limited comprehension and learning will occur. The teacher may explain to students the worth of reading specific selections. A deductive approach is then utilized. Should the teacher utilize a questioning approach to have students perceive the values of reading, an inductive method is in evidence.

Thirdly, students should experience interesting learning opportunities. If learners are attracted to reading subject matter, they will attain more optimally as compared to a lack of interest. It behooves the reading teacher to permit students to select more of their very own materials to read. Interest from students will provide for effort in reading. Interest and effort become integrated, not separate entities. Students tend to be interested in content which they selected on an individual basis. Attending to the task at hand is important. Interest will make for the attending to time on task.

Fourthly, individual differences among students need adequate attention. There are slow, average, and fast achievers, on a continuum, in reading. Materials for students to read must be on diverse levels of achievement to provide for each category of achiever. Subject matter contained in the reading materials needs to be varied to provide for diverse interests that learners bring to the reading curriculum. New interests must also be developed within students. The reading teacher's philosophy of teaching must adhere to respecting differences among students. Each person has dignity, much worth, and must be guided to achieve as much as possible in reading.

In Conclusion

Reform in the reading curriculum is needed. A great debate in the teaching of reading is needed. State mandated objectives and IMS with their measurably written goals should be compared with holistic philosophies in the teaching of reading. The writer recommends strongly that a holistic procedure in reading instruction be implemented. Reading involves understanding sentences, paragraphs, and larger bodies of knowledge. Dividing skills into precise objectives for learners to attain violates what the actual act of reading is about.

Quality research in reading must be refined and emphasized. However, research results are indeed confusing. Much negative research has been conducted and has little worth. Improved methods of conducting research must be emphasized. A study of the philosophy of education is very helpful in determining objectives, learning opportunities, and appraisal procedures. Perhaps, achieving a quality philosophy of teaching reading has more worth as compared to conducting and using research results. However, with improved means of doing educational research, their results can continually assist to improve the reading curriculum.

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TEACHING HISTORY IN THE SOCIAL STUDIES

A study of history needs to be stimulating, challenging, as well as provide for students of diverse achievement levels. Too frequently, history has been boring, repetitious, and routine. The teacher must possess comprehensive subject matter knowledge in teaching history. Beyond the breadth and depth of known subject matter, the history teacher must utilize desired principles of learning from the psychology of education. Utilizing these principles of learning, the history teacher is better able to secure the attention of learners in ongoing lessons and units, as well as assist students to retain more optimally acquired subject matter. Which criteria then should the teacher of history emphasize from the psychology of education?

Principles of Learning and History

To guide students to attain more optimally in history, the teacher needs to provide meaningful experiences. When subject matter has meaning, students understand vital facts, concepts, and generalizations. When students do not attach meaning to what is being learned, achievement goes downhill. Students may think of other things than the achieving of objectives in ongoing lessons and units in history. Meaningless content lacks vitality and use for students.

A second principle of learning emphasizes that students experience interesting learning opportunities. Securing the attention of students in a given lesson becomes easier after obtaining learner interest in the subject matter. A variety of materials are available to guide students to attain objectives in history. These materials include textbooks, workbooks, worksheets, as well as audio-visual aids. Diverse kinds of materials need to be utilized as learning opportunities to assist students to attain vital goals in history. The reason given for using a variety of kinds of materials and activities is not for the sake of doing so, but to develop interest within students to learn. With interest, effort is put forth by learners to achieve and progress in history. Low energy levels for learning are due, in many cases, to a lack of student interest in learning.

Thirdly, students need to perceive purpose in learning. If purpose is present, learners perceive reasons for achieving goals in the history curriculum. Perceived purpose may be developed inductively by students. The history teacher needs to be a good asker of questions to assist students in arriving at purposes to attain goals in ongoing lessons and units. Students then are guided to perceive reasons for learning. Deductive procedures may also be utilized to assist learners to perceive purposes in studying historical units of study. With deduction, the history teacher clearly and concisely explains the value of subject matter to students in the curriculum. Perceiving purpose in learning guides students to realize the worthwhileness of subject matter being studied in history.

Fourthly, the history teacher needs to develop the whole person by emphasizing three categories of objectives in teaching-learning situations. One category of objectives - understandings - should guide students to attain worthwhile facts, concepts, and generalizations. Understanding objectives in history need careful selection and weight. What is significant needs to be stressed in teaching and learning. Skills, as a second category of objectives, emphasize students engaging in critical and creative thinking, as well as problem solving. Students engage in learning by doing when skills objectives are emphasized in the history curriculumm. Psychomotor learnings also stress acquiring skills objectives. Students need to think critically as well as creatively pertaining to content in history. Being able to identify and solve problems in history is equally salient.

Attitudinal goals also need attainment by students. Positive attitudes toward learning aid learners in attaining understandings and skills goals. Wholesome attitudes are indeed salient for student achievement in the curriculum, as well as in the societal arena. Students should like and prize the study of history.

The history teacher also needs to provide for individual differences among students. Fast, average, and slow learners should achieve as much as possible in history. No student should be deprived of learning as much history as possible. With a variety of learning opportunities, including the use of reading and audio-visual aids, each student must be encouraged to achieve optimally.

To summarize, students need to receive

1. meaningful learning opportunities.
2. interesting activities.
3. purposeful experiences.

4. learning opportunities which emphasize understanings, skills, and attitudinal goals.

5. activities and experiences that guide each learner to learn as much history as possible.

Philosophy of Education and the Teaching of History

Philosophy provides direction to the history teacher in selecting objectives, learning opportunities, and appraisal procedures in the curriculum. Each teacher needs to develop a personal philosophy of teaching history. Philosophies need to be studied, analyzed, and selected strands implemented based on careful thought and evaluation.

Experimentalism, as a philosophy of education, stresses a problem solving strategy. Students with teacher guidance identify problems in ongoing lessons and units in history. The problem chosen is adequately delimited in order that solutions may be sought. To solve a problem, data must be gathered. Data comes from the use of primary and secondary sources. A hypothesis, or answer to the identified problem, is an end result. The hypothesis is tentative, never absolute, and subject to testing. Discussions, as well as further primary and secondary sources, may well be a means of testing the hypothesis. The hypothesis is then accepted, modified, or refuted.

The sequential steps of problem solving are flexible, not rigid. Problems selected need to be life-like, not artificial. These problems exist in society. History and society are not to be separated from each other, but are integrated entities. With learners being heavily involved in problem selection, purpose or reasons for learning are inherent. With purpose, interest comes forth in learning. The interest provides from effort. Effort must be put forth by all students to achieve objectives in history. To experimentalists, interest and effort are one and not separate from each other.

Experimentalists believe that one can know reality through experiences alone. The individual interacts with members in society. Knowledge is then secured. Knowledge comes from problem solving endeavors in the societal arena of change. Knowledge is always tentative due to the world of change. With change, problems arise. New problems need identification and solutions. In perceiving solutions, the experimentalist always looks at the consequences. The consequences are tentative and need to be tested. Society changes and with change, new problems arise. Tentativeness, not absolutes, is a key concept in experimentalist thinking.

Realism, as a second philosophy of education emphasizes that the knower can know the real world in whole or in part, as it truly is and exists. The knower does not merely experience the real world, but receives a duplicate or replica of it. Since the real world can be known in whole or in part, precise objectives need to be attained sequentially by students. The specifics that make up the real world can be identified in any academic discipline.

The history teacher needs to select the measurably stated objectives that students are to achieve. The objectives must be arranged by the teacher in ascending order of complexity. From the simple to the complex is an excellent guideline for the history teacher to utilize in arranging the precise ends in proper sequence for student achievement. A logical history curriculum is then in evidence.

The real world of history can be known by learners, partially or entirely, after attaining an increased number of measurably stated objectives.

The history teacher must select learning opportunities which guide learners in goal attainment. After instruction, teachers can measure if students have or have not achieved each goal successfully.

Each objective must be precise and measurable to determine if students have or have not achieved the desired end.

A third philosophy of education which is idealism may also be emphasized in the teaching of history. Idealists believe the knower can only receive ideas of history, and not experience it per se, or know history in whole or in part as it truly is or exists.

The history teacher, as an idealist, selects vital subject matter in lessons and units for student attainment. Idealism emphasizes strongly that the mind or intellect of the learner needs cultivating. Mental development in history is the overall objective for students to attain. Mind is real and needs to be developed while achieving vital concepts and generalizations. Thus, the attainment of subject matter by learners becomes the number one objective in history. The history teacher must be educated and trained to be a true academic. The academic knowledge of the teacher can then be transmitted to students. With the use of textbooks, single or multiple series, workbooks, selected academic audio-visual aids, as well as dynamic lectures and discussions, students hopefully will achieve significant abstract ideas in history. The universal and the abstract is to be prized above the concrete and the specific.

Existentialism, as a fourth philosophy of education, stresses choices and decision-making by the individual in a flexible, open ended learning environment. Each student, for example, may select which tasks to complex sequentially at diverse learning centers. The learner may omit tasks which lack personal relevance and interest. Time on task is important. Compulsion and force to have students learn is frowned upon. Students individually shoulder responsibilities in selecting learning opportunities and completing the tasks therein.

A second method of emphasizing tenets of existentialism pertains to student-teacher planning of objectives, learning activities, and appraisal procedures in ongoing lessons and units. The emphasis here is on cooperative planning involving students with teacher guidance. A third procedure stressing tenets of existentialism emphasizes a contract system. The teacher plans with each student as to what the latter would like to complete as learning activities in the contract., The student needs to be heavily involved in planning the contents of the contract. The due date, as well as the signature of the student and the teacher, should appear on the contract.

As students progress, develop, and achieve, increased facets of existentialism may be emphasized. Existentialists believe that each person is condemned to be free. First, an individual is born and exists, then he/she must find their essence or purposes in life. The purposes are given to no person. They must be sought within the framework of an absurd environment. Values clarification strategies in history work well. Leaders making history made choices from the many alternatives. Students in history classes need also to learn to make decisions with many alternative choices in the offing.

Existentialists believe knowledge to be subjective, not objective. Truth resides within the individual. The individual must learn to make choices within an absurd, subjective environment. The choices must be moral decisions within a free environment. Permitting others to make choices for the self emphasizes a lack of being human. To be human means to make choices personally with many options available.

To summarize each philosophy of education, the following statements can be made.

1. Experimentalism stresses a problem solving strategy.

2. realism stresses the use of predetermined, measurably stated objectives for students to attain.

3. idealism advocates a subject centered curriculum in which mental development of learners is stressed.

4. existentialism emphasizes moral choices and decisions be made by learners in an open ended environment.

Computer Assisted Instruction in History

Computer Assisted Instruction (CAI) has much to offer in the history curriculum. A first type of software to emphasize in CAI is drill and practice. Drill and practice emphasize review of what students have learned previously. Vital facts stress the need for drill and practice. These facts can be forgotten unless drill and practice is in evidence. Quality software needs selection and implementation in ongoing lessons and units. The software must relate directly to the lesson or unit in history presently being taught. Also, the content in the software needs to be understandable by involved students. Meaning must be attached to vital facts.

As a second kind of software, tutorials need to be emphasized in the history curriculum. Tutorials present new information or subject matter to students. Sequential content must be in the offing. Learners may then experience success in the software presentation. With tutorials, as well as other types of software, quality sequence needs to be in evidence. Producers of software need to try out their materials in pilot studies, prior to marketing the product. If students in the pilot study make an excessive number of errors while interacting with the program, an improved sequential set of experiences need to be in the offing. Evaluating if the order of experiences in the software program is appropriate remains crucial. If learners do not experience success in learning , there will be a tendency for underachievement to be in evidence.

Simulation, as a third kind of software program, needs to stress reality and realness in its learning opportunities. Artificial situations in simulations need to be avoided. The real world must be emphasized in simulated situations. Within the real world, problems arise. To solve each problem, alternative choices exist. Students must consider the alternative choices, prior to making a decision within the problem solving arena. Simulations should emphasize integrating school and society. What is out in society needs to be inherent in the curriculum. School and the societal arena can be brought together in simulation software programs. As is true of all software, students need to have ample opportunities to interact with content presented on the monitor. Responses involving deliberation must be made by students to problems presented on the monitor. Individual as well as committee decisions can be made by students working with simulations in the history curriculum.

Games, as a fourth kind of software, should receive ample emphasis in history. One or a committee of learners may work on a game. Easier questions to respond to are worth fewer points to the student, as compared to more complex questions selected. The individual or the group that has the most points wins the game. Game software should assist students to achieve objectives in history. Learners may learn not only worthwhile facts, concepts, and generalizations in history, but also achieve wholesome attitudes toward others within the framework of a competitive learning environment, such as in the playing of games using software and microcomputers.

All software needs to be debugged, prior to its use. Thus, there should be no spelling, punctuation, capitalization, or grammatical errors. Accurate subject matter in history needs to be in the offing. Trivia and the irrelevant should be weeded out.

In Summary

The history teacher must follow desired principles of learning from the psychology of education when teaching students. These guidelines in their implementation should guide learners to achieve more optimally in history.

A comprehensive knowledge of the philosophy of education provides guidance and direction to the history teacher in selecting objectives, learning opportunities, and appraisal procedures in ongoing lessons and units. The best of each philosophy must be chosen by the teacher to provide direction in the teaching of history. Hopefully, quality philosophies of education implemented in the teaching of history will aid learner progress in the curriculum.

Software and microcomputer use must guide students to attain objectives in history. Selection of software needs to follow definite guidelines so that learners individually may achieve as much as possible in history.

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LEARNING ACTIVITIES IN THE SOCIAL STUDIES

Students need to understand facts, concepts, and generalizations in ongoing lessons and units. Thus, meaningful learnings may accrue on the part of each student. Also, each learner needs to perceive purpose or reasons for learning. Otherwise, motivation for learning, no doubt, will go downhill. Interest in lessons and units must be developed or maintained. Attaching oneself to what is being learned emphasizes interest in ongoing activities. Which learning opportunities might then be provided to students?

The Student And The Curriculum

Each student needs to achieve optimally. The following, among others, might provide for individual differences in a unit on The Middle East, as a model:

1. Guide students to understand causes for disputes among the opposing sides--Israel versus the Palestinian Arabs. Thus, learners may research, using a variety of reference sources, content on

(a) the Mac Mahon--Hussein correspondence in 1915 in which Great Britain promised independence to Arabs living in the land of Palestine.

(b) the Balfour Declaration in 1917 whereby Great Britain offered the land of Palestine, as a homeland for Jews.

(c) the United Nations plan in 1947 to divide the land of Palestine into a Jewish state and an Arab state.

(d) the 1967 Six day war in which Israel captured the Sinai Peninsula and the Gaza Strip from Egypt, the Golan Heights from Syria, and the West Bank of the Jordan River from the Hashemite Kingdom of the Jordan.

(e) the 1973 war between Egypt and Syria versus Israel, which ended in a stalemate.

(f) the peace agreement signed between Egypt and Israel in 1979. The Sinai Peninsula was returned to Egypt by Israel.

2. Assist learners to understand why the Holy Land area is salient to both Jews and Arabs. Learners may research content on ancient Jewish leaders, such as Moses, King David, King Soloman, and Judas Maccabeus. Important leaders among Arabs in the ancient world included Mohammed, Abu Bakir, Uthman, and Omar. The Jewish Wailing Wall (also called the Western Wall) inside the walls of present old Jersusalem is the only remnant of the ancient Jewish temple. Directly east of this area and also inside the walled city is the Dome of the Rock, a beautiful Moslem mosque completed in 691 A.D. From the Dome of the Rock, according to devout Moslems, Mohammed ascended into heaven and came back to earth again.

A variety of reference sources may be utilized by students to acquire needed information. These include textbooks, encyclopedias, films, filmstrips, slides, cassettes, knowledgeable resource personnel, and illustrations.

3. Have students plan an imaginary tour of the Holy Land Area. Much information from diverse data sources need location prior to actually planning the tour. Among others, the following places may appear significant:

(a) the Church of the Nativity in Bethlehem where Christ was born in a manager, according to beliefs of devout Christians.

(b) the tomb of Rachel. located near Bethlehem which signifies the site of the death of one of Jacob's wives named Rachel. The Tomb is holy to both Jews and Arabs.

(c) the Mosque of Abraham in Hebron. The patriarch Abraham is the forefather of both Jews and Arabs. Isaac was a son of Abraham and his descendents were Jews, whereas Ishmael, also a son of Abraham, has Arabs as descendents. The Mosque of Abraham contains the tomb of Abraham together with his wife Sarah.

(d) the Samaritans near Nablaus. There are approximately 400 Samaritans on the face of the earth. Most live on Mount Gerizim. Ancient Samaria is located near Nablaus.

(e) the Church of the Holy Sepulchre inside the walls of Old Jerusalem. Here, according to Crusaders, Christ had been entombed. The Crusaders captured Jerusalem in 1099 A.D. The Church of the Holy Sepulchre was built in 1142 A.D.

4. Guide students to understand vital facts, concepts, and generalizations involving geography of the Holy Land. Jericho in located 700 feet below sea level. The Dead Sea, located four miles south of Jericho, is 1300 feet below sea level. Learners need to understand affects in terms of temperature readings of regions located below sea level. Degrees in north or south latitude also need to be considered as to possible reasons for a specific type of climate. The Middle East has a Mediterranean climate. Thus, students need to understand why nations in this area have, basically, no rainfall from April to November with winter rains beginning in November and generally ending by the first of April.

Jerusalem is located 2500 feet above sea level and is located in a westerly direction from Jericho at a distance of eighteen miles. Students should compare temperature readings of Jerusalem and Jericho at the same time of day. Reputable almanacs, encyclopedias, and textbooks, among other reference sources, can provide needed information.

5. Other experiences for students might involve the following:

(a) developing a relief map containing nations of the Middle East.

(b) a committee completing an outline and giving an oral report to the class on Islam and Judaism.

(c) Making a movie set in which two wooden dowel rods are extended through an open front cardboard box. A roll of clear paper should be placed around the dowel rods. Students with teacher assistance may draw illustrations and write sentences underneath each picture to explain its content. Students might place on the roll of paper subject matter pertaining to Hezekiah's tunnel located directly east of the Old City of Jerusalem whose waters flow into the Pool of Siloam. Related content should be written under each illustration, such as why Hezekiah's tunnel was built and why the Assyrians were unable to capture Old Jerusalem in 722 B.C.

PROVIDING FOR INDIVIDUAL DIFFERENCES AND DESIGNING THE CURRICULUM

Part One: Providing for Individual Differences

There are selected differences among pupils which must be considered thoroughly in order to provide for all learners in the class setting. Thus, pupils differ from each other in interest, capacity, achievement, social development, socio-economic level, and psychomotor skills. These traits will now be considered in the order presented above.

Pupil Interest and the Social Studies

There are selected learners in the class setting who feel that social studies is the most interesting curriculum area in the elementary school. Others may feel neutral toward the values to be gained from studying units of study in the social studies, or that it is the least interesting curriculum area in the elementary school. Why do selected pupils feel that social studies is the most interesting curriculum area as compared to those who may dislike studying this curriculum area?

1. The teacher provides for a variety of learning experiences such as the use of excursions, reading activities, films, filmstrips, tapes, slides, pictures, study prints, discussions, resource personnel, and panel work.
2. Plans for grouping pupils are utilized which guide pupils to experience continuous progress such as in the nongraded school.
3. Each pupil is praised for progressing well in the social studies.
4. The teacher is interested in teaching the social studies and this enthusiasm is reflected within learners.
5. Learning activities are selected by the teacher on the basis of capturing pupils' interests.
6. Teacher-pupil planning is utilized in determining objectives, learning experiences, and assessment procedures.
7. The teacher uses feedback from pupils in evaluating when to change

learning experiences to something which is more interesting to pupils.

8. The family in the home setting discusses news items and other content pertaining to the social studies.

There is much that teachers can do in attempting to obtain the interests of pupils in the social studies.

Capacity of Pupils and the Social Studies

Native capacity of learners may be an important consideration to keep in mind when thinking of pupils who achieve well in the social studies as compared to those who may gain less rapidly in this curriculum area. No intelligence test, of course, accurately measures native capacity of pupils. Even the best intelligence tests have their weaknesses in attempting to appraise native capacity. This is true for the following reasons:

1. It is difficult to separate native capacity from opportunities to learn on the part of any student.
2. Test writers have a difficult time in the writing of items on any examination which might truly reflect the native capacity of any individual.
3. A pupil's score on an IQ test generally varies from the first time to the second time the same or an alternate form of the test is taken even when the intervening interval is short between the two times the test was taken.

High capacities on the part of pupils should aid in pupil achievement in the social studies due to the following reasons:

1. If the pupil has considerable native intelligence, chances to develop more complex concepts and generalizations should increase.

2. Schools tend to emphasize abstractions in ongoing learning experiences. Pupils with high IQ's can generally handle abstract content better than learners who have less to show in the area of mental maturity.

Pupils with high intelligence quotients may be guided in the following ways to realize optimal achievement:

1. Do additional tasks at selected learning centers; these tasks require more complex levels of thinking.

2. Engage in research activities requiring a variety of learning experiences.
3. Present research findings to classmates.
4. Interview resource personnel to gather data pertaining to selected problem areas.
5. Plan learning activities with the teacher which would be challenging and purposeful.
6. Work on art and construction projects which would clarify selected concepts and generalizations in depth.

Pupils with below average capacity may need to have the following experiences in ongoing units of study in the social studies:

1. Concrete and semi-concrete learning activities need to be utilized more so than those stressing the abstract.
2. Sequence in learning must be adjusted to where each pupil is presently.
3. Easier tasks must be provided for those pupils who do not have the native capacity that faster achievers possess.
4. Teacher-pupil planning may aid in adjusting learning activities to the present achievement level of slow learners.
5. A variety of learning activities must be in evidence so that all learners may be successful in the class setting.

It is important to provide for all learners regardless of capacity levels. Each pupil is important and has great worth. The teacher must perceive her overall goal in teaching to help guide each pupil in realizing his/her highest potential. It is important then to continually study each pupil in order to determine where his or her present achievement level is. The teacher may then determine which learning opportunities would be most beneficial for each child in the class setting.

Pupil Achievement in the Social studies

It is vital to guide each pupil to achieve optimal development in the social studies. Pupils, of course, differ much from each other in achievement in the social studies as well as in other curriculum areas in the elementary school. How can the teacher of social studies aid each pupil to progress well?

1. Use teacher-pupil planning in selecting relevant units of study.

2. Have pupils within a structured framework select what they wish to learn.

3. Let learners individually pace their own achievement in terms of rate of speed.

4. Reward each pupil for improved performance.

5. Permit pupils to have ample opportunities in assessing their own achievement with instructor guidance.

6. Have adequate materials from which pupils may learn.

7. Carefully develop appropriate teaching strategy to initiate, develop, and culminate ongoing units of study.

8. Use inductive approaches adequately in the teaching of pupils.

9. Use stimulating teaching materials when expository methods of instruction are used in ongoing learning opportunities.

10. Give pupils assistance and guidance when necessary in teaching-learning situations.

11. Do not label pupils such as being "dull", "slow", and "disinterested".

12. Provide for different styles of learning in the class setting.

13. Respect all pupils regardless of race, creed, and socio-economic levels.

Social Development and the Pupil

Pupils differ much from each other in social development. Thus, learners individually may exhibit behavior such as the following when interacting with others:

1. Being shy, withdrawn, and reserved.
2. Exhibiting aggressive behavior in wanting to dominate others.
3. Revealing kind, friendly, and polite behavior.
4. Being overly polite and wishing to impress others.
5. Talking "down" to other individuals.
6. Being aloof and impersonal.
7. Avoiding the discussion of controversial issues.
8. Showing feelings of mistrust to others.
9. Being a showoff and wishing to entertain others.
10. Revealing tremendous leadership capacity.
11. Being quiet and studious.
12. Wanting to be the "strong person" in a group.
13. Disagreeing constantly with others.
14. Being considerate of others.
15. Holding grudges for long periods of time.

The social studies teacher must study individual pupils in terms of present levels of attainment in social growth and guide learners in living rich, full lives. Each child needs to experience that which is fulfilling. Thus, pupils must experience a learning environment filled with diverse kinds of experiences which are interesting, meaningful, and purposeful. Adequate emphasis must be placed upon learners engaging in committee work if social development is to be in evidence. Committee work, in and of itself, definitely will not guide pupils in achieving well socially. Each pupil must experience success and satisfaction within committee settings in order that positive social development may be in evidence. The teacher then must plan learning centers or arrange pupils in committee work which will foster skills in the area of social development.

1. Pupils with teacher aid may plan and implement worthwhile standards of conduct in the class setting. These criteria must stress the importance of the total growth of each individual, including social development.

2. Pupils with the supervision of the teacher might initiate, develop, and evaluate a mural pertaining to content in an ongoing unit of study.

3. Learners in a committee could write and present a short play relating to a unit of study.

4. Pupils can develop a small stage, background scenery, and puppets; a related presentation may be given to classmates.

5. With teacher guidance, a committee of learners may construct models relating to content being studied in social studies units.

6. Within a committee setting, pupils could plan and execute a dramatization such as creative dramatics or a pantomime.

7. Pupils may engage in conversation in the class setting. Proper standards for conversing should be stressed in this learning activity involving oral communication.

Socio-Economic Levels and the Pupil

Pupils come from diverse socio-economic levels in the home and community setting. Thus, pupils may come from homes such as the following:

1. There is barely enough income to obtain the necessities of life.
2. The parent or parents are unemployed and depend upon welfare funds in order obtain food, clothing, and shelter.
3. Selected pupils come from a very favorable home environment with adequate income and loving parents.
4. A child lives with a grandparent; the child was not wanted by the parents.
5. There are seven children living with one parent in a two bedroom house; the combination living and dining room is very small. The parent finds it very difficult to obtain enough money to provide for the needs of the children.

Many other descriptions could be given of pupils who come from favorable as well as unfavorable home environments.

What can the teacher of social studies do to provide for individual differences among pupils who come from homes representing diverse socio-economic levels?

1. Accept all pupils as human beings having much worth.

2. Assess each pupil to determine present levels of achievement. The curriculum must then be adjusted to present achievement levels of learners.

3. Encourage each child to achieve to his/her own optimum rate of achievement. Do not force pupils in the class setting to achieve at the same rate at the same time in any given curriculum area.

4. Attempt to determine the learning style of each pupil and thus provide learning experiences beneficial to each learner in the school and class setting.

5. Have adequate knowledge pertaining to the home and community environment of each pupil. The social studies teacher needs to use this information to improve the curriculum for each learner.

6. Have pupils with teacher guidance, sequence their own progress in learning.

7. Hold frequent conferences with individual pupils to obtain feedback to improve the curriculum.

8. Use unsigned questionnaires to obtain information from pupils on interests, hobbies, and talents.

9. Use a variety of evaluation techniques to obtain data from each learner to improve the curriculum.

10. Show genuine interest in each pupil.

Psychomotor Skills and the Pupil

Pupils need to achieve well in the psychomotor domain. Thus, pupils must develop skill in the use of the muscles. Learners, of course, will be at different levels of achievement here as is indicated by the following examples:

1. Jimmy is in the fifth grade and has little or no interest in baseball, basketball, or other athletic endeavors. He has difficulty catching a baseball thrown from a nearby area.

2. Carl is proud of being the fastest runner among classmates. He actively participates and excels in games involving much physical movement.

3. Alice, a third grade child, prefers to watch others rather than participate in the playing of games.

4. John, a sixth grade student, wants to become a professional basketball player. He spends as much time as possible playing basketball, as well as engaging in other sports, in the home and school setting.

5. Mary, a fourth grade pupil, is almost always chosen first when teams are formed to play either baseball or basketball. Pupils admire her for performing as well as any boy in athletic events.

Pupils do admire others who are able to use their muscles will. Thus, pupils who are proficient in the playing of games may enjoy considerable status. What can the teacher do to guide pupils in developing needed skills in the psychomotor domain?

1. Develop an environment whereby pupils respect each other regardless of present achievement in the psychomotor domain.

2. Stimulate pupils in wanting to participate in learning experiences involving the psychomotor domain.

3. Develop positive attitudes within pupils pertaining to the use of the muscles in teaching-learning situations.

4. Integrate an adequate number of psychomotor domain objectives into the social studies curriculum.

5. Have pupils engage in learning activities in which success may be experienced.

The following are selected learning experiences in the social studies for pupils in the psychomotor domain:

1. Pupils may learn representative folk dances pertaining to the unit presently being studied.

2. Learners may play games that children play in other countries of the world, as these units are being studied.

3. Pupils may engage in construction activities as they relate to ongoing units of study.

4. Learners may develop a mural, a frieze, or individual sketches directly related to the ongoing unit of study.

5. Puppets and marionettes may be made by pupils individually or in a committee.

6. Pupils may dip candles, make butter, or engage in similar process activities in the social studies.

In Summary

Definite provisions should be made for individual pupils in the class setting. Differences that exist among pupils in the school and class setting include the following:

1. Differences in pupil interest in ongoing learning experiences.

2. Differences in capacity among learners.
3. Differences in achievement among learners.
4. Differences in social development.
5. Differences in socio-economic levels.
6. Differences in psychomotor development.

It behooves the teacher to study each pupil thoroughly in terms of the above named characteristics. The teacher of social studies needs to set realistic goals for each pupil to achieve in all facets of development. Relevant learning opportunities need to be provided for pupils in order to achieve these objectives. Evaluation of pupil achievement is then necessary to determine if desired objectives have been met.

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Part Two: Designing the Social Studies Curriculum

The teacher of social studies needs to give careful consideration to the design of the social studies program for elementary children. Each pupil should be guided to achieve to his or her optimum in terms of understandings, skills, and attitudinal objectives. Thus, it is necessary to place adequate emphasis upon the design of the social studies curriculum for elementary pupils.
The design of the curriculum area of social studies should follow these criteria:

1. Each pupil should achieve success in learning.

2. Learners need to experience appropriate sequence in ongoing learning experiences.

3. Pupils must experience integrated learning experiences with adequate emphasis being placed upon content cutting across boundaries and borders of diverse academic disciplines.

4. Learning experiences for pupils take into careful consideration previous understandings, skills, and attitudes developed.

5. Pupils individually should have ample opportunities to develop well socially as well as to achieve to their optimum in working on an individual basis in ongoing learning activities.

6. Adequate emphasis needs to be placed upon pupils developing well intellectually, emotionally, socially, and physically.

7. Pupils need to participate in learning activities which require a relatively quiet environment such as in reading social studies content as well as participating in activities which require physical movement and manual dexterity.

8. the teacher needs to select objectives, tasks, and appraisal techniques in teaching--learning situations, as well as pupils with teacher guidance identifying relevant goals, learning experiences, and assessment procedures in the social studies curriculum.

Social Development and Achievement on an Individual Basis

Pupils need to develop well socially. Thus, individuals are able to interact well with others in a group setting. Additional reasons inherent in guiding pupil to achieve well socially would be the following:

1. The school is a social setting comprised of pupils, teachers, custodians, cafeteria workers, the principal, the supervisor, and other workers such as remedial reading specialists and guidance counselors. Thus, it behooves the teacher in guiding pupils to be able to interact well with others.
2. Much content is learned from other human beings; thus, it is important to be able to possess necessary skills in human relations to develop well intellectually, physically, socially, and emotionally.
3. Satisfying human relations aid pupils in feeling successful in the school setting. One facet of development that all human beings need to be successful in is the area of good human relations.
4. Teachers need to emphasize considerable committee work in a quality social studies program; thus, pupils need to be able in interact well with others in order to accomplish relevant goals within a group setting.
5. Politeness,as a valued asset in society, demands that each human being develop optimally in the area of social development and group interaction.

It is important then for teachers to select an adequate number of learning experiences which guide pupils to achieve to their full potential in social development. Pupils may work in committees using open space education and learning centers. Centers such as the following may be developed which could guide pupils in interacting well with others in a committee setting:

1. A writing center. Pupils could cooperatively develop a poem, story, or engage in research.

2. An art corner. Here pupils may cooperatively plan and develop a mural.

3. A contruction center. Pupils within a committee may decide upon the kind of industrial arts project to be developed relating to an ongoing unit of study. Following this decision, learners with teacher leadership may implement their decisions directly relating to the construction activity.

4. A reading station. Pupils may share content of library books and stories

read in a group setting.

5. A dramatization corner. Selected learners cooperatively may plan and implement a dramatization related to ongoing learning experiences. Thus, pupils again have opportunities to work harmoniously together with other learners.

6. A story telling center. Here pupils may take turns telling creative stories to others in a committee setting.

7. A listening center. Pupils may listen to selected tapes and share major ideas gained using agreed upon criteria for committee work.

Criteria need to be emphasized when learners work in a committee setting. Cooperatively, pupils with teacher guidance may develop guidelines such as the following:

1. Pupils should respect the thinking of others.
2. Each pupil needs to contribute to his or her optimum in committee work.
3. No one should dominate committee endeavors.
4. Evaluation of pupil achievement within the committee setting must be positive and facilitate rather than hinder learner progress.
5. Each pupil should have ample opportunities to choose which tasks to pursue within a committee setting.
6. Ideas in a discussion should flow within the committee rather than from chairperson to participant only.

Pupils also need to have numerous opportunities to work individually on selected learning activities. Situations in life demand that human beings individually engage in profitable experiences. Thus, the school setting may emphasize learning experiences such as the following:

1. Pupils selecting and reading library books and stories of their choosing.

2. Each pupil may select approaches to reveal knowledge gained from units of study in the social studies. Art work, written products, oral reporting, written reports, and construction projects may provide ways for pupils to reveal learnings obtained from ongoing units of study.

3. Learners individually may select a research problem and gather needed information in attempting to arrive at a solution.

4. Each child could select a club or organization to join in the school setting such as a social studies club in which the student could select a project of his own choosing to work on.

5. After completing a given assignment, the child may choose the next learning activity such as engaging in art work, or in a construction project, or participating at a writing center.

The learner should find experiences satisfying, fulfilling, and rewarding when working on a learning activity involving individual efforts.

The Integrated Social Studies Curriculum

Social studies lends itself well to placing emphasis upon the integrated curriculum. Too frequently in the past, social studies has been taught in terms of separate academic disciplines. Thus, separate units of study have been emphasized pertaining to geography only, history only, or political science only. It is important for pupils to develop learnings in depth pertaining to each of the social science disciplines emphasized in elementary school social studies such as history, geography, political science, economics, sociology, and anthropology. Learners must also perceive that content from these social science disciplines can be interrelated. Using problem solving approaches in teaching-learning situations can aid pupils to perceive that facts, concepts, main ideas, and generalizations are related. Thus, the fused social studies curriculum may become a reality in teaching-learning situations. Pupils should also perceive the relationship of science, music, art, and physical education, for example, as an inherent part of a good social studies program. In a common social studies unit on "Communication in the United States," pupils with teacher guidance may

1. develop telegraph sets; thus, principles of science may be brought into the ongoing social studies unit with learners studying electromagnets and how they operate.

2. write selected verse relating to content being studied; attempts may be made in setting the words to music.

3. plan and develop individual illustrations, friezes, murals, and dioramas pertaining to major generalizations being studied.

4. engage in rhythmic activities relating to main ideas contained in the ongoing unit of study.

Selected problems need to be identified and attempts made at remedying these situations pertaining to the implementation of the fused or integrated curriculum:

1. Each social science discipline should receive adequate emphasis in the social studies curriculum.

2. Content should not be fused or integrated for the sake of doing this. Rather fused and integrated content should make learnings more meaningful to pupils.

3. Selected pupils may need to develop learnings in depth pertaining to a specific curriculum area or to a facet of this curriculum area. The concept of diagnosis should be implemented to determine when the separate subjects curriculum needs to be emphasized in ongoing learning activities as compared to fused and integrated approaches.

Developing the Total Child

In educational history, much emphasis has been placed upon the intellectual development of the learner. At the turn of the last century, more emphasis has been placed upon learners achieving well in other facets of development also, such as social, emotional, and physical. The social studies curriculum must help pupils achieve to their optimum in all four facets of development--intellectual, social emotional, and physical. The following learning experiences are mentioned to reveal learning opportunities pertaining to all areas of a child's development:

1. participating in critical thinking, creative thinking, and problem solving activities (intellectual development).

2. learning to play games of a specific country being studied in social studies (physical development).

3. working together with other learners in a committee to develop a mural or frieze (social development).

4. choosing a library book to read voluntarily or freely selecting a task to complete at a learning center (emotional development).

Why should the total development of pupils be emphasized in the school and class setting?

1. Each facet of development influences the achievement of a different area of growth such as positive attitudes or feelings (emotional growth) aid in achieving well in intellectual achievement.

2. Individuals need to develop well in social, emotional, physical, and intellectual achievement if self-fulfillment of human beings is to be in evidence. A person who is not well developed socially, for example, will be greatly handicapped when attempting to achieve well in situations involving the world of work as well as in more informal interactions with other human beings.

3. With more leisure time available for many citizens as compared to earlier times, it is imperative that positive recreational pursuits are in evidence. Thus, for example, the emotional development and physical achievement of individuals are of utmost importance.

Readiness for Learning

To achieve to the optimum in a given unit of study, pupils need to obtain adequate background experiences. Thus, the teacher needs to guide pupils to achieve in the following areas in terms of readiness for learning:

1. The pupil must have enough background information to benefit from a new unit of study.

2. If these prerequisites have not been met, then objectives need to be stated at an easier level. Pupils need to be successful in achieving new goals in the social studies.

3. A variety of learning activities may be provided to assist learners in securing necessary readiness experiences to benefit from ongoing tasks, such as the use of pictures, films, slides, filmstrips, discussions, and field trips.

4. Problem solving approaches may be utilized to guide learners in achieving necessary prerequisite learnings. Within the framework of problem

solving, critical thinking may be utilized to appraise necessary content in arriving at solutions. Creative thinking may be used to arrive at unique and novel solutions to problems.

5. Feedback from learners should be utilized in determining if pupils are ready for achieving new objectives.

6. Pupils should have ample opportunities to raise questions in a stimulating environment for learning. Thus, the individual learner will reveal where he is presently in social studies achievement.

7. The teacher needs to guide pupils to engage in self evaluation. Thus, learners may be involved in assessing readiness for learning.

8. The teacher of social studies must attempt to select those learning experiences which will guide pupils to experience continuous progress and success in achieving new objectives.

9. Using appropriate pretesting techniques can aid in determining if pupils are ready to benefit from stated objectives in a new unit of study. Thus discussions may be utilized in determining where pupils are presently in social studies achievement.

Teacher-Pupil Planning

To emphasize democracy as a way of life in the school setting, pupils must have ample opportunities to engage in helping to plan objectives, learning experiences, and assessment procedures. Thus, teacher-pupil planning can become an important part of the elementary school social studies curriculum. There are many opportunities during any school day for learners to engage in teacher-pupil planning.

1. The content of selected learning centers may be developed through teacher-pupil planning.

2. Bulletin board displays might be an end result of teacher-pupil planning.

3. Problem areas for an ongoing social studies unit may be developed through teacher-pupil planning.

4. Reference sources utilized in problem-solving activities may be cooperatively identified.

5. Standards of conduct can be developed by pupils with teacher guidance.

6. Selected objectives for a unit of study can be identified cooperatively involving pupils and teachers.

7. Means of evaluating pupil achievement during and at the end of a unit may be planned by pupils with teacher leadership.

There are important standards to follow when teacher-pupil planning is utilized as a learning activity in the school setting:

1. All should participate with no one dominating the discussion.
2. Ideas should be presented to the total group and not to a few individuals only.
3. Ideas should be discussed and evaluated in depth.
4. Content presented should flow among members within the committee and not between individuals only.

The Learning Environment

Teachers of social studies must give careful consideration to the quality of learning environment in the school and class setting. Thus, pupils must experience a quality environment for learning which would aid each to achieve optimal development. Educators generally would agree upon the following standards pertaining to an atmosphere which is conducive to pupil achievement and development:

1. A relaxed environment should be in evidence where pupils may get needed materials as well as share content with others.
2. A supportive climate needs to exist in which pupils feel that concern exists for their welfare.
3. Pupils individually are rewarded for achieving at an optimal rate of growth.
4. Mutual respect is in evidence for pupils and teachers in the school and class setting.
5. Pupils' rights and the rights of teachers are of mutual concern in ongoing learning experiences.

Child growth and development characteristics must be thoroughly considered when determining the quality of learning environment for pupils in the class and school setting. Primay grade pupils may exhibit the following characteristics:

1. They generally follow the teacher eagerly in terms of expectations.

2. Much physical movement is necessary since these pupils basically are continually on the move when freedom of choice is given in terms of activities to participate in.

3. Gradually, these pupils tend to interact more with each other as they progress through the primary school years.

4. The finer muscles are not developed as well as the larger muscles. Thus, handwriting and writing activities in general may cause stress and strain if excessive time is given to these kinds of learning activities.

Intermediate grade pupils tend to reveal general behavior such as the following:

1. Peer culture is becoming increasingly important whereas adult influence may become less important.

2. With more background information, intermediate grade pupils may become more proficient in critical thinking and problem solving as compared to primary grade pupils.

3. Intermediate grade pupils are continually increasing their skills in using the finer muscles. Thus, learning copportunities involving writing experiences can be stressed more frequently as compared to the primary grade levels.

4. Intermediate grade pupils are continually becoming more proficient in social interaction as compared to primary grade pupils.

5. Intermediate grade pupils should and do become increasingly more independent from adult direction.

The following factors need to be emphasized in ongoing units of study for elementary age pupils:

1. Pupils must have ample opportunities to work within a committee framework. Skills in positive human relations are important for pupils to achieve. Everyday living stresses the importance of individuals getting along well with others.

2. The use of the larger muscles should be encouraged, of course, throughout

the public school years. The use of the larger muscles would involve experiences such as running, jumping, hopping, skipping, and throwing.

3. Skill in the use of the finer muscles must be continuously emphasized in teaching-learning situations. Thus, refined movements of the human being such as in writing activities should be emphasized in terms of child growth and development characteristics.

4. Critical thinking, creative thinking, and problem solving need to be emphasized throughout the pupil's public school years. Life in society demands proficiency in these highly important cognitive skills.

5. Good attitudes must be developed within all learners since optimal achievement in all facets of growth may take place only if affective objectives are achieved by learners.

In Summary

Teachers of social studies, supervisors, and principals must give careful consideration to the design of the curriculum. Thus, factors such as the following must be taken into consideration when designing the social studies curriculum:

1. social and individual achievement on the part of pupils.
2. integration or fusion of content in ongoing units of study.
3. the total child being perceived as being important in teaching-learning situations.
4. proper sequence in pupil learning being in evidence.
5. adequate emphasis being placed on teacher-pupil planning in the social studies.
6. quality learning environments being stressed in social studies units.

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Oral Communication and the Curriculum

A basic, in addition to the three r's (reading, writing, and arithmetic), is oral communication. Much of subject matter and opinions communicated is done orally. Within the framework of the three r's, oral communication is continually in evidence and necessary. Thus, in reading, writing, and arithmetic, ideas are discussed, problems are identified, and conclusions are emphasized orally. In society, opinions, facts, concepts, generalizations, and main ideas are elaborated upon. It almost appears as if oral communication permeates whatever transpires between and among persons in school and in society.

Since oral communication is a basic in the curriculum, which objectives, learning experiences, and appraisal procedures are worthwhile to emphasize?

Objectives in Oral Communication

To develop student proficiency in oral communication, objectives need to be carefully identified. Each end must be relevant, significant, and useful to the learner. Trivia needs to be weeded out of the curriculum. Individual differences among slow, average, and fast achievers must be respected. No two students should be held to the same level of attainment. Each student has utmost value and needs assistance to achieve as much as possible. Objectives should be stated at an optimal level at which a student can be successful in learning. The ends then should not stress goals whereby students attain failure in oral communication. Nor should the objectives be so relaxed in that a lack of challenge in learning is in evidence. The language arts teacher needs to preassess and appraise where each student is presently achieving in oral communication. Once the ends have been stated, a stimulating learning environment needs to be in evidence so that each student can achieve ongoing objectives.

Objectives also need to emphasize meaningful content. A learner then must attach meaning to goals being achieved. Rote learning or memorization make for lower cognitive levels of objectives. Facts are the building blocks for students to move on to higher levels of thinking. Students need to comprehend and attach meaning to facts inherent in oral communication. From the cognitive level of comprehension, students need to use what has been learned. Applying what has been acquired is then significant. What is learned in oral communication has utilitarian values in society. School and society should not be separated, but be integrated entities. It is important also for students to be able to analyze or think critically about subject matter in oral communication. Critical thinking involves separating facts from opinions, fantasy from reality, accurate from inaccurate statements, and to make contrasts and comparisons. Creative thinking is a further significant goal in emphasizing meaningful learnings. Novel, unique ideas are significant in creative thinking. New ideas are needed in society to change, modify, and improve the societal arena. Objectives in problem solving truly stress integrating school and society. In society, problems abound. The problems need solutions. Evaluating the quality of each solution is necessary. Objectives then should emphasize what is meaningful to the learner. Content becomes personally relevant and understandable when it possesses the quality of meaning.

Thirdly, objectives should stress securing the interests of students in oral communication. Interest of students is a powerful factor in learning. With interest, the student and the subject matter to be learned become integrated, and not separate entities. Interest tends to provide its very own effort in learning. Interest within learners is established to achieve worthwhile learnings and attain desired objectives. Interest is not trivia or random, but focuses upon goal attainment. Relevant subject matter to be acquired is emphasized when interest becomes a dominant criterion in having students learn and achieve. A very excellent guideline, among others, for the teacher to utilize is to encourage student interest in learning. Objectives in oral communication must reflect the concept of learner interest in the curriculum.

Objectives in oral communication need to emphasize purpose in learning. Reasons then exist for having students achieve objectives. The student tends to accept what is purposeful. A lack of purpose means energy levels are low for learning. Increased purpose for learning emphasizes the student perceiving more reasons for participating in ongoing units of study. Purposes established in oral communication should be clear and attainable for each student. The purposes must be acceptable. Hopefully, from within or intrinsically, the student will perceive reasons to achieve worthwhile goals of instruction.

Fifthly, goals in oral communication should reflect affective ends. Positive attitudes then need to be developed by students. These feelings assist students to acquire subject matter learnings. Quality attitudes toward the self and others are vital. Greater achievement in oral communication is possible if students feel competent and have a desire to learn. Vital affective goals in speaking need identification. Learning activities for students to attain the chosen ends should be in evidence and implemented. Validity in evaluation procedures should follow. The language arts teacher needs to know how well students are achieving in oral communication. It is essential for the teacher to know sequential progress of each student. Only then can ordered objectives be stressed in ongoing lessons and units.

Philosophy of Teaching Oral Communication

Philosophy provides guidance and direction in teachers selecting objectives, learning activities, and appraisal procedures. Diverse philosophies will now be discussed to assist teachers in oral communication curriculum development.

The experimentalist believes that one can know experiences only, in life. One then cannot know the real world as it truly is. Nor, can one know ideas alone, of what actually is and exists. Since in experimentalism the person can only know experiences, change in school and in society is in emphasis. With change, problems come into existence. These problems need clarity and identification. After the problem is adequately delimited, data or information may be gathered to secure answers to the problem. The data provides a hypothesis in answer to the problem. The hypothesis is tentative and subject to testing. The hypothesis is then subject to revision. The flexible steps of problem solving involve much oral communication, especially since committee endeavors are recommended by experimentalists. Why? In society, committees are at work to solve problems. All in society are involved in working on diverse committees at different times. Group decision making is at the heart of experimentalism, as a philosophy of education and of life. Within committees, diverse kinds of speaking activities are in evidence. Experimentalists have much to offer in guiding students to develop proficiently in interacting well orally with others. School and society must not be separate, but integrated entities. Problems can be identified by any student in each of the different curriculum areas. Solutions to each problem must be in the offing.

As a second philosophy of education, realism has much to offer the language arts teacher. The realist tends to believe in whole or part that one can know the real world as it truly is. The real world is there independent of the observer. Since the real world can be known as it truly is, the specific of knowledge is knowable. Precise, measurable stated objectives should be utilized in teaching and learning. After instruction, it can be determined if a student has or has not attained the precise end. Independent of any observer and in measurable terms, one can know if a student has or has not attained the precise end. It is measurable to determine the number of ends achieved by any one learner if the objectives are stated with precision and in observable terms.

Speaking activities for students may emphasize precise objectives to attain. These measurable ends may be written prior to instruction.

The objectives should then be announced to students prior to teaching-learning situations being implemented involving oral communication. Diverse kinds of oral expression experiences may be practiced by students such as making of introductions, impromptu speeches, discussions, after dinner speeches, and advertising a product. After the learning opportunities have been completed, the language arts teacher measures if a student has or has not attained the precise end. The objectives must be clearly stated. After instruction, according to realists, it must be possible to determine if the ends have been attained by students. Guesswork must be eliminated in ascertaining if a student has been successful in goal attainment.

A third philosophy, namely idealism, has much to recommend itself in terms of developing teaching strategies in oral communication. Idealism emphasizes that one can only know ideas about phenomena. One then cannot know in and of themselves how objects truly are in their natural environment. The idea centered idealist stresses a subject centered curriculum. Subject matter, not an activity centered method of teaching, is important to emphasize in ongoing learning situations.

Subject matter, in all its significance and vitality, can be stressed in oral communication. Each student then must be assisted to possess accurate, comprehensive subject matter content in speaking activities in the language arts. Idealists tend to emphasize that students achieve generalizations based on facts. However, the generalizations are more salient than the facts. Therefore, idealists would recommend that students be guided to achieve broad generalizations. These broad ideas can be checked in terms of accuracy. They must be comprehensive to include specific facts.

Idealists also tend to stress ideals. Immanuel Kant (1724-1804) emphasized the Categorical Imperative. The Categorical Imperative, as emphasized by Kant, an idealist, states that one should act and behave in a way that those deeds become universal for all to live by and accept. Certainly, speaking activities can emphasize in discussion settings how to react in order that universal principles would be achieved.

Existentialism, as a fourth philosophy in the oral communications curriculum, stresses the individual in the making of choices and decisions. Life consists then of making awesome choices in an absurd environment. The social and natural environment represents anything but a rational way of life. To be human means to make choices and decisions. If others are permitted to choose for the self, the latter no longer is human. The chooser accepts the consequences of each decision made. Others are not blamed for the results of a choice. The chooser then cannot blame others for decisions made.

Oral Communication

In oral communication, discussions, oral reports, debates, and dramatic activities, existentialism can be emphasized. Content in the speaking activities may well emphasize paradoxes in life. Clearcut answers do not exist in terms of resolving dilemmas. One must still choose and make decisions within the absurdity of life's situations. Thus, the subject matter of oral communication can definitely emphasize existential thinking.

What is to be learned by the student can also stress existentialism. Thus, students may select sequential tasks to complete and omit in the use of learning centers. Teacher-student planning of what the latter is to learn can also be stressed, outside the framework of learning centers. However, adequate input in the curriculum must be in the offing from students. Otherwise, learners cannot be involved in the making of choices and decisions, as advocated by existentialists. Content in the curriculum should emphasize values and the clarification of values. To an existentialist, knowledge is subjective, not objective, to the individual making the choices and decisions. Each initiative by the involved person must have a moral basis.

In Closing

The writer has discussed a psychological and philosophical basis to utilize in selecting objectives for students to achieve in oral communication. Criteria to use in selecting objectives would be the following:

1. individual differences need adequate provision.
2. content should make sense and be meaningful.
3. the interests of learners need to be secured for satisfaction to occur in learning.
4. students need to perceive purpose in learning.
5. quality attitudes need to be developed within students.

The above are excellent criteria for language arts teachers to emphasize in selecting goals for student attainment.

The writer also discussed a philosophical basis for making decisions pertaining to oral communication objectives. These include experimentalism, realism, idealism, and existentialism. From a study of philosophy of education, the writer recommends using the following philosophical strands:

1. problem solving approaches to acquire vital subject matter and methods to increase student skills in oral communication.
2. precise objectives and observable results from student achievement. Creative and critical thinking must not be hindered in the process.
3. academic content stressing universal knowledge, as advocated by idealists.
4. students learning to make choices and decisions, as recommended by existentialism.

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DR. EDIGER

SYSTEMATIC TEACHING VERSUS INCIDENTAL LEARNING

THERE ARE EDUCATORS WHO ADVOCATE SYSTEMATIC APPROACHES AND METHODS OF TEACHING. TEACHING MIGHT THEN BE CLASSIFIED AS A SCIENCE RATHER THAN AN ART. A DEFINITE SYATEM OR STRUCTURE IS THEN INVOLVED IN THE ACT OF TEACHING. CAREFUL SELECTING OF PRECISE, MEASURABLE OBJECTIVES IS VITAL IN SYSTEMATIC MEANS OF INSTRUCTION. A PRETEST IS GIVEN COVERING THE OBJECTIVES TO WEED OUT WHAT PUPILS HAVE ALREADY ATTAINED. THE TEACHER THEN DOES NOT TEACH WHAT PUPILS HAVE ALREADY ACHIEVED. IF PRETEST RESULTS REVEAL THAT SELECTED OBJECTIVES WERE TOO COMPLEX FOR LEARNER ATTAINMENT, THESE ENDS MAY BE MODIFIED IN COMPLEXITY, OR OMITTED. THE TEACHER NEEDS TO CHOOSE LEARNING ACTIVITIES WHICH GUIDE PUPILS TO ACHIEVE WHAT IS CONTAINED IN EACH MEASURABLE OBJECTIVE. NO OTHER STIMULI ARE NEEDED IN THE CHOSEN LEARNING ACTIVITIES. AFTER INSTRUCTION, THE TEACHER MUST MEASURE TO DETERMINE IF A PUPIL HAS/HAS NOT ACHIEVED EACH SEQUENTIAL OBJECTIVE.

INCIDENTAL LEARNINGS ARE ACQUIRED BY LEARNERS ON THEIR VERY OWN. THE TEACHER NEEDS TO PROVIDE A RICH LEARNING ENVIRONMENT CONTAINING OBJECTS, ILLUSTRATIONS, FILMS, FILMSTRIPS, SLIDES, STUDY PRINTS, AND TRANSPARENCIES. HOWEVER, THE INVOLVED PUPILS CHOOSES WHICH MATERIALS TO ATTEND TO. THE INTERESTS AND PURPOSE OF LEARNERS ARE INVOLVED IN MAKING DECISIONS AS TO WHAT TO LEARN SEQUENTIALLY. THERE ARE NO REQUIREMENTS IN INCIDENTAL LEARNING. EACH PUPIL CHOOSES WITHIN A HIGHLY FLEXIBLE ENVIRONMENT THAT WHICH IS PERSONALLY SATISFYING TO LEARN.

SYSTEMATIC INSTRUCTION

IN SYSTEMATIC PROCEDURES OF INSTRUCTION, THE TEACHER MUST INDEED BE THE DECISION MAKER IN TERMS OF OBJECTIVES, LEARNING

ACTIVITIES, AND EVALUATION PROCEDURES IN THE CURRICULUM. GENERALLY, THERE ARE FEW CHOICES FOR LEARNERS TO MAKE. THE TEACHER IS CERTAIN AS TO WHAT WILL BE TAUGHT TO PUPILS SINCE THE MEASURABLE OBJECTIVES CONTAIN CLEAR STATEMENTS OF INTENT. THERE IS LITTLE OR NO WANDERING OR WAVERING IN TERMS OF WHAT A TEACHER WILL BE TEACHING. CONSIDER THE FOLLOWING MEASURABLE GOALS:

1. THE PUPIL WILL SPELL FIFTEEN OF SEVENTEEN WORDS CORRECTLY.
2. THE PUPIL WILL ANSWER CORRECTLY NINE OF TEN MULTIPLE CHOICE ITEMS.
3. THE PUPIL WILL PRONOUNCE/IDENTIFY CORRECTLY EIGHTEEN OF TWENTY NEW WORDS.

IN OBJECTIVE NUMBER ONE ABOVE, THE TEACHER SELECTS AND KNOWS EXACTLY WHICH WORDS ARE TO BE SPELLED CORRECTLY BY PUPILS. FIFTEEN OUT OF SEVENTEEN IS A MINIMAL LEVEL OF ACCEPTANCE. IN OBJECTIVE NUMBER TWO ABOVE, THE TEACHER CHOOSES WHICH ITEMS WILL APPEAR ON THE MULTIPLE CHOICE TEST. THE INVOLVED LEARNING ACTIVITIES WILL THEN REFLECT SUBJECT MATTER IN THE MULTIPLE CHOICE ITEMS. IN OBJECTIVE NUMBER THREE ABOVE, THE TEACHER HAS SELECTED TWENTY NEW WORDS THAT PUPILS ARE TO MASTER. THE MINIMAL LEVEL OF ACCEPTANCE IS EIGHTEEN OF THE TWENTY WORDS.

THE TEACHER THEN NEEDS TO CHOOSE LEARNING EXPERIENCES TO HELP EACH PUPIL ACHIEVE THOSE LEARNINGS STATED IN EACH OBJECTIVE. AFTER TEACHING PUPILS TO ATTAIN THE STATED ENDS, THE TEACHER MEASURES WHICH PUPILS HAVE BEEN SUCCESSFUL AND UNSUCCESSFUL IN ACHIEVEMENT. UNSUCCESSFUL LEARNERS NEED NEW LEARNING ACTIVITIES IN ORDER THAT OBJECTIVES CAN BE ACHIEVED SEQUENTIALLY.

REASONS GIVEN FOR ADVOCATIONG SYSTEMATIC MEANS OF INSTRUCTION INCLUDE THE FOLLOWING:

1. CERTAINTY NEEDS TO EXIST IN THE TEACHER'S MIND AS TO WHICH SUBJECT MATTER PUPILS ARE TO LEARN. ONLY MEASURABLY STATED GOALS USED IN TEACHING CAN PROVIDE THIS EXACTNESS.

2. THE GOAL OF/FOR PUPILS ATTENDING SCHOOL IS TO INCREASE LEARNING IN DESIRED DIRECTIONS. FOR KNOWLEDGE TO ACCRUE PERTAINING TO SUBJECT MATTER HAVING BEEN LEARNED BY PUPILS, THE TEACHER MUST MEASURE IF EACH OBJECTIVE HAS BEEN ACHIEVED. THE UTILIZATION OF MEASURABLE GOALS MAY WELL PROVIDE THIS KNOWLEDGE.
3. PRIOR TO TEACHING, A TEACHER NEEDS TO ANNOUNCE TO PUPILS PRECISE GOALS THEY ARE TO ATTAIN. THUS, EACH PUPIL MIGHT DEVELOP AN APPROPRIATE MENTAL SET FOR LEARNING.

INCIDENTAL LEARNINGS

THERE ARE SELECTED EDUCATORS WHO ADVOCATE STIMULATING PUPILS IN A RICH ENVIRONMENT IN ORDER THAT INDEPENDENT LEARNING MAY ACCRUE ON THE PART OF LEARNERS. THUS, PUPILS MAY LEARN MUCH ON THEIR VERY OWN. THIS, OF COURSE, IS NOT TO SAY THAT ANY EDUCATOR WOULD RECOMMEND PUPILS LEARNING ENTIRELY USING THE INCIDENTAL METHOD. HOWEVER, MANY LEARNINGS CAN BE ACQUIRED INCIDENTALLY BY PUPILS.

EACH CLASSROOM MAY HAVE AN AQUARIUM AND A TERRARIUM. PUPILS MAY LEARN ABOUT THE CHARACTERISTICS OF FISH IN AN AQUARIUM. THUS, A LEARNER MAY REALIZE THAT FISH POSSESS GILLS INSTEAD OF LUNGS. HAVE SCALES ON ALL OR PART OF THEIR BODIES, ARE COLD BLOODED, AND THE ADULT FEMALE LAYS EGGS. A PUPIL IS LEARNING NUMEROUS CONCEPTS AND GENERALIZATIONS PERTAINING TO BIOLOGY WITH A CLASSROOM AQUARIUM TO STIMULATE INCIDENTAL LEARNINGS. A FROG (AMPHIBIAN) AND A TURTLE (REPTILE) MAY BE HOUSED IN THE TERRARIUM. PUPILS MIGHT THEN LEARN THAT FROGS (TADPOLES) SPEND THEIR EARLY LIVES IN WATER AND POSSESS GILLS. LATER, FROGS DEVELOP LUNGS AND LIVE ON LAND. THE YOUNG HATCH FROM EGGS. REPTILES HATCH FROM EGGS AND GENERALLY POSSESS LUNGS. FROM VIEWING ANIMAL LIFE AT AN AQUARIUM AND A TERRARIUM, PUPILS MAY ASK QUESTIONS OF EACH OTHER AND OF THE TEACHER, AS WELL AS UTILIZE REFERENCE MATERIALS TO FIND NEEDED ANSWERS TO IDENTIFIED PROBLEM AREAS. LEARNINGS PERTAINING TO OTHER VERTEBRATES-BIRDS AND MAMMALS-MIGHT ALSO BE ACQUIRED BY PUPILS INCIDENTALLY.

FROM LIBRARY BOOKS, FILMS, FILMSTRIPS, SLIDES, PICTURES, STUDY PRINTS, AND OTHER AUDIO-VISUAL MEDIA, PUPILS CAN DEVELOP NUMEROUS VALUABLE IDEAS IN AN INCIDENTAL MANNER. THE RESOURCE MATERIALS MUST BE READILY AVAILABLE TO EACH PUPIL SO INDEPENDENT LEARNING MIGHT TRULY BE ACHIEVED.

HOW MIGHT THE INCIDENTAL LEARNING APPROACH BE UTILIZED IN THE SCHOOL/CLASS SETTING?

1. AFTER REASONABLE ASSIGNMENTS HAVE BEEN COMPLETED BY ANY CHILD. AMPLE OPPORTUNITIES THEN NEED TO EXIST TO LEARN INCIDENTALLY.
2. AS A REWARDS TO PUPILS INDIVIDUALLY WHO ARE DOING WELL IN ONGOING UNITS OF STUDY. REGARDLESS OF CAPACITY AND PRESENT ACHIEVEMENT LEVELS, EACH PUPIL SHOULD HAVE OPPORTUNITIES TO LEARN IN AN INCIDENTAL MANNER.

IN SUMMARY

HOW MUCH OF SYSTEMATIC INSTRUCTION UTILIZING SEQUENTIAL MEASURABLY STATED OBJECTIVES SHOULD BE EMPHASIZED IN THE CURRICULUM? SHOULD HEAVY EMPHASIS BE PLACED UPON PUPILS GAINING INCIDENTAL LEARNINGS? TEACHERS AND SUPERVISORS NEED TO ASSESS THE PROS AND CONS OF EACH METHOD OF TEACHING AND LEARNING. A SYNTHESIS OF THE TWO PHILOSOPHIES MIGHT BE A RELEVANT END RESULT. LEARNING EXPERIENCES FOR PUPILS SHOULD BE INTERESTING, HAVE MEANING, AND PROVIDE PURPOSE IN ONGOING UNITS OF STUDY.

EVALUATING THE PHILOSOPHY OF EDUCATION OF MARVA COLLINS

Marva Collins has made considerable headlines in American education. While public schools have tended to receive negative comments, Marva Collins has been received rather positively in the eyes of newsreporters and the lay public. Ms. Collins was on "60 Minutes" in 1979 and in 1981 in the television drama "Marva Collins Story". She is a featured speaker at many state and national education conventions. Among others, Ms. Collins was the keynote speaker at the Missouri State Teacher's Association (MSTA) convention in St. Louis, November, 1987. Her picture appears, large and attractive, on the MSTA official publication School and Community, Fall, 1987.

Marva Collins was a strong candidate for the Secretary of Education position with the Reagan Administration. She also comments frequently on philosophies of life and living. Fortune magazine stated Ms. Collins philosophy as being "if you don't work, you don't eat."

Marva Collins taught in the inner city schools of Chicago for fourteen years. She was very displeased with the methods of teaching used there, such as in disciplining and keeping students quiet, as well as teachers doing as little as possible in teaching. She then started Westside Prep in a ghetto area of Chicago. The school day runs from eight to three with a twenty minute lunch break as the only time off during the day. Two hundred students, ages three through thirteen attend Westside Prep. Ms. Collins indeed believes strongly in high goals for students to achieve.

Students in Westside Prep take classes in classical literature. Thus, the writings of Shakespeare, Socrates, Plato, Ralph Waldo Emerson and Henry David Thoreau, among others, are studied by students. Ms. Collins believes that students are definitely not challenged adequately in learning subject matter. Emerson's beliefs are stressed in hitching one's wagon to a star. The goals of instruction indeed emphasize complex objectives at the Westside Prep School. Ralph Waldo Emerson emphasized "self reliance". "Lean upon thyself" was also strongly advocated by Emerson.

Pertaining to emphasizing the classics in the curriculum, the following evaluative statements appear pertinent:

1. Classical content is complex. The writer while working on his doctorate in education had as required reading in one of his classes Plato's Republic. The Republic in its original was not comprehendable. Commentaries were read first to attach meaning to the Republic. Later, the

Republic was read in its original.

2. It is difficult to state which the basics are in the curriculum. Ms. Collins, no doubt, believes selected classics represent the basics, including the writings of Plato, Shakespeare, Emerson, and Thoreau. Few other educators would emphasize the classics as basics for elementary school age students.

Careful selection of subject matter needs to be in evidence, as well as quality sequence in the curriculum. Child growth and development characteristics need adequate emphasis in selecting objectives, learning activities, and evaluation techniques. Each student needs to attain optimally.

Marva Collins has selected three year olds who read on the first grade level. Ms. Collins believes that "if you reach for the stars and come out with a piece of the sky, it's better that not having reached at all". Before the school day begins, students recite a creed one page in length written by Ms. Collins. A part of the creed states "Society will draw a circle that shuts me out, but my superior thoughts will draw me in. I was born to win, if I do not spend too much time trying to fail." Self Reliance by Ralph Waldo Emerson, is taught beginning with the fourth grade level. To show sophistication a five year old in the classroom drills classmates, as young as three years of age, on sounds of the letters (grapheme-phoneme relationships).

Marva Collins believes that textbooks are watered down. The content therein is too simple. She feels that dialogue between students and the teacher is lacking. Teachers use true-false test items and do not converse with students as to why an answer is right or wrong. Students feel a lack of challenge in school and are bored. Ms. Collins elaborates on John Stuart Mill (1806-1873), English philosopher, who learned to read Latin at age seven. Students come to school with a good background of knowledge and go backward in achievement while attending the public schools, according to Ms. Collins.

Pertaining to slogans, creeds, and achievement of individuals past and present, Ms. Collins:

1. Operates on a very optimistic frame of reference. Human beings should definitely attempt to operate on a philosophy of good will, fairness, and innate goodness. However, persons come to school of diverse ability, interest, achievement, and motivation levels. Each has some optimal level which he/she can achieve. John Stuart Mill (1806-1873) was a child prodigy. Mill was a genius in many walks of life, including that of a philosopher. A rare

person indeed could match the achievement of John Stuart Mill.

2. Stresses isolate facets of the lives of Henry David Thoreau (1812-1843) and Ralph Waldo Emerson (1803-1882). Emerson stated "lean upon them self" as well as "trust thine own thinking." No doubt, each person must learn to lean upon the self. Parents become old, if they live long enough, and eventually die. Life itself states that one should be self reliant. However, selected individuals with a lack of or limited capacity must, by necessity, lean upon others. Unemployed individuals due to technology and trends in society cannot support themselves. They need help from others. Each student must be assisted to achieve optimally regardless of handicaps processed.
3. Advocates conformity of students to drill and practice activities, whereas Thoreau and Emerson were nonconformists. Thoreau lived on the Walden pond area. He worked thirty days in the woods to build a house and secure necessities of life. The other days of the year, Thoreau observed nature and recorded meticulously his findings. It

> would be very doubtful if Thoreau could conform to any formal classroom situation of today. His nonconformity is emphasized when he spent time in prison for refusing to pay taxes to support the Mexican-American war of 1848. Ralph Waldo Emerson stated "he who would be a man must be a nonconformist." Emerson was a highly creative person in essays written and speeches presented.

The writer agrees with Ms. Collins in that students need to look for and emulate quality models. However, whichever models are utilized must be realistic. Truly, each student needs to learn as much as possible and achieve self-realization.

Marva Collins is a strong believer in the _A Nation at Risk_ report. A _Nation at Risk_ published in 1983 advocated each student on the secondary school level take four years of English, and three years each of mathematics. science, and social studies. _A Nation at Risk_ used loaded terminology in referring to American education as being a rising tide of mediocrity. Whether there is more mediocrity in public schools as compared to other institutions in American society is debatable. The public schools have been subject to much criticism without adequate documentation.

Ms. Collins also laments the large numbers of people in society who are illiterate. She seems to blame the public schools for these ills. Other institutions and agencies in society seemingly do not share this blame,according to her thinking.

Pertaining to A Nation at Risk and blaming the public schools for illiteracy among individuals in society, the following seem reasonable statements to make:

1. If the present public schools curriculum is deficient, why would additional required years of English, mathematics, science, and social studies instruction be beneficial? The additive approach here would appear illogical in Ms. Collins thinking.
2. Which objectives in English, mathematics, science, and social studies should be implemented for talented, average, and slow learners? For example, with four years of required English courses for all, which level of complexity of objectives for slow learners should be emphasized? What will be the holding power of schools when slow learners are required to take the number of years of required course work, as emphasized by A Nation at Risk?

3. What role does vocational education have for public school students? Is vocational education inferior to academic course work? A Nation at Risk ignored vocational education.
4. What blame should be placed upon poverty, racial discrimination, unstable homes, unemployment, and irrational governmental economic policies in assisting illiteracy to grow in numbers? How much responsibility should the individual himself/herself accept in learning to read?

Marva Collins lives an enriched life with many opportunities to speak, travel, and write. Her life evidently is filled with challenge, creativity, and desirable new experiences. To be sure, she has numerous critics and skeptics of her methods of teaching, as well as of the subject matter taught. However, Ms. Collins is not strapped down in a classroom setting, five days a week for a nine month school year. Thus, for example, elementary school teachers in the latter situations cannot leave the school building. These teachers are robbed of their creative talents and abilities due to

1. State mandated objectives that are handed down for the teacher to implement.
2. State mandated tests which indicate how well the mandated objectives have been

taught.

3. District wide instructional management systems (IMS) in which objectives and tests have been developed at the central office level for teachers to emphasize in the classroom.
4. Pupils assigned directly without the input of classroom teachers involved.
5. A lack of teaching materials and supplies.
6. Outdated buildings with leaky roofs and banging steam radiator pipes. With outdated heating systems, temperature readings can be in the 90's or in the 50's Fahrenheit.
7. An excess number of pupils in a classroom, such as a thirty to one ratio.
8. Pupils who possess severe handicaps and cannot be assisted adequately due to the time factors involved in helping these mainstreamed individuals.
9. A lack of voice in hiring new teachers to be employed within a school building.
10. Constant criticism in the news media. Constant criticism is different from the concepts of aid, support, help, guidance, and professional decision-making.

Westside Prep is a private school where enrollment is selective. In contrast the public schools must accept all students regardless of handicaps possessed. This for example, an emotionally disturbed pupil must be accepted for instruction in the public schools, regardless of the circumstances.

In Closing

Individuals differences need to be provided for in the classroom. Each student needs to learn as much as possible. Problem solving and decision-making skills developed by students in the school curriculum are vital also in society. Rote learning and memorization of isolated items need to be minimized. Rather knowledge, concepts, and generalizations are related and have utilitarian values for students. Learners need to attach meaning and understand what is being taught.

Grouping Pupils in the Elementary School

Numerous approaches have been recommended by educators in grouping pupils for instruction. Certainty does not exist as to which plan of grouping is best. Each recommended approach of grouping pupils seemingly contains strengths as well as weaknesses. Teachers, principals, supervisors, and parents must consider and assess each of these approaches in grouping pupils for instruction. The psychology of learning is important as well as child growth and development characteristics when making a final decision pertaining to grouping pupils for instruction.

Faculty members of an elementary school need to become thoroughly knowledgeable as to the various possibilities that exist in grouping pupils for instruction. Each plan should be evaluated in terms of acceptable criteria or standards. No thinking person would advocate new approaches to grouping without being fully knowledgeable about their strengths and weaknesses. It is important that there be widespread acceptance of a new plan for grouping before it is implemented. Teachers, principals, supervisors, and parents should be in much agreement about a new plan for grouping before it is implemented. Each elementary school should also study thoroughly the present plan being used for grouping pupils for instruction. Thus, a gap may be noticed between where the school is presently in the area of grouping pupils for instruction as compared to where it should be.

One of the most difficult tasks involved in implementing a new plan for grouping pupils may well be to get parental acceptance. Parents can be satisfied with the most traditional plan of grouping available. The lay public then must reach a stage of disequilibrium whereby they no longer are satisfied with the status quo. The following approaches may be utilized to develop this state of disequilibrium within the lay public:

1. Talks given at Parent-Teacher Association meetings pertaining to new plans of grouping pupils for instruction.
2. Ideas about new plans for grouping being injected when parent-teacher conferences are held.
3. Newspaper articles bringing in items pertaining to new approaches in grouping pupils for instructional purposes.
4. The possibilities of presenting concepts and generalization pertaining to grouping pupils on a local television or radio station should be explored.
5. Talking informally to parents at open house and on other occasions about grouping pupils for instruction.
6. Faculty members of an elementary school should discuss creative approaches in informing the lay public relating to proposed innovations in the schools.

Any plan for grouping pupils is not a panacea. It is a means to an end but not an end in and of itself. The new plan of grouping pupils for instruction should aid in improving the curriculum. It should guide in improving teaching-learning situations in the elementary school. Too frequently faculty members have felt that a new plan for grouping pupils should solve all ills in an elementary school. A newly implemented plan for grouping pupils could present many new problems to the involved school. If a team of teachers cannot work together cooperatively, the innovation may cause more grief than improvement over previous plans of grouping. As another example, in a departmentalized plan for grouping pupils, learners may not develop well emotionally and socially if the teacher goes overboard for teaching subject matter only.

Intellectual development of pupils to be sure is important; however equally important is physical, social, and emotional development.

Plans for grouping pupils have been misunderstood by teachers, principals, and supervisors. For example, there are elementary schools which are called "nongraded schools" by name only. Teachers by example in their teaching may be emphasizing the use of fifth grade materials, for example, in teaching all fifth graders regardless of capacity and achievement levels. The nongraded philosophy is definintely not being implemented in cases such as these. "Turn teaching" has been confused with team teaching. In turn teaching, each teacher does his or her own preparing for teaching with no cooperative endeavors involved in planning together with other team members in terms of objectives, learning activities, and evaluation teachniques. Each teacher then takes his turn in teaching in large group sessions as well as working with smaller groups, and individual pupils. As will be discussed later, team teaching emphasizes that members of a team plan together teaching strategies for a given set of learners. It is important that teachers, principals, and supervisors understand the basic underlying principles that each plan emphasized in grouping pupils for instruction.

There will, no doubt, be different interpretations for the philosophy or rationale behind each plan for placing pupils into groups; however, there will be considerable agreement also in interpretation of the underlying principles pertaining to each plan of grouping. For example, the nongraded elementary school states the importance of pupils experiencing continuous progress. Hardly could pupils experience continuous progress if all pupils in a class are on the same page at the same time when utilizing the basal reader, for example, as a learning activity. The only exception to this case could pertain to a class of pupils which are highly homogeneous in terms of reading achievement. This would indeed be rare, however, when thirty pupils, for example, would make up the total number in a class setting. Even then there would be individual differences that need to be provided for.

The Nongraded School

The nongraded elementary school has much to offer in terms of helping learners to be successful. As was stated previously, a basic principle underlying this approach to grouping is that pupils should experience continuous progress. Teachers can be "overly ambitious" in wanting learners to achieve thus causing pupils to lose out in the ongoing activities. It is no wonder then that pupils experience failure and eventually develop or maintain feelings of inadequacy. Pupils should feel that they are achieving to their optimum thus feelings of success become a part of the child.

In the nongraded elementary school, it is important that teachers attempt to determine reading levels of pupils as early as possible. Pupils are generally grouped homogeneously based on reading achievement. It is good if an elementary school has at least three roomfuls of pupils of a given chronological age. If there were only two roomfuls of eight year olds, for example, it would be difficult to group them homogeneously. The range of achievement in reading in each room would be great indeed. With three roomfuls of pupils of a given chronological age, the chances are fairly good of achieving some degree of homogeneity in grouping pupils for instruction within each classroom. More homogeneity would be possible in grouping if there were more than three roomfuls of pupils on a given age level. Within each classroom pupils could be further grouped into three different achievements levels in reading. Pupils should be placed in the reading group which is in a harmony with their level of achievement. Flexible grouping is important. It is important to put pupils in another group if they demonstrate that the original group they were placed in was not in harmony with their present achievement level. Teachers must evaluate pupil achievement continuously to determine the group that each child would benefit most from. At the end of a specific school year, the teachers should record where learners left off in terms of materials used and skills mastered. This would be important so that pupils do not repeat unnecessarily previous materials read and skills mastered. With the beginning of a new school year, the teacher would need to do some reviewing of what learners had learned previously since some forgetting, of course, will have occurred of previously developed learnings. The teacher would also need to engage in reteaching that which necessitates doing this.

The sky is the limit in pupil achievement in the nongraded school as long as there is continuous progress for learners and success is in evidence. Thus, for example, pupils who would be in the sixth year beyond kindergarten of the nongraded schools could be reading from and using seventh and eighth grade materials providing this harmonizes with their capabilities presently in reading. A slower group of pupils in the same age group may be reading from and using fourth grade reading materials since this harmonizes with their present achievement level. The teacher would accept pupils where they are presently in reading achievement and help them to progress continuously.

Ideally, there should be no failures in the nongraded school. No one, of course, basically likes to be a failure or have feelings of failure. In the graded school concept, some pupils have repeated a grade since they did not achieve up to grade level in reading achievement or did not realize standards set by the teacher. Some cannot achieve up to grade level standards since they lack the necessary capacity, interest, motivation, or home background. For others, it is not challenging enough to realize fifth grade standards in reading, for example, if they are in the fifth grade. Their capacities, interests, and motivation would demand realizing a higher level of achievement than the grade level they are in presently. The nongraded school emphasizes the importance of providing for individual differences. If pupils fail in the graded school, they may use the same materials over again for the next school year. Certainly, this does not help learners to achieve continuous progress. He may even have the same teacher again which constantly can remind him of failure! These examples do not exemplify basic underlying principles of the nongraded school.

There are, of course, some weaknesses of the nongraded school. If pupils would be grouped homogeneously continuously, there would be no opportunities within the school setting for pupils to interact with other children of different capacity and achievement levels. Certainly life in society does not operate that way. Individuals intract with others of different capacities, interests, achievement levels, and background knowledge.

There are teachers who may not wish to teach the slowest group of pupils. They may not have the knowledge, patience, interest, and poise to work with the slowest group of achievers. The attitudes and feelings of the teacher, no doubt, will be reflected within learners. To make matters worse, parents may not have the necessary positive attitudes to accept the fact that their child is in the slowest group. Certainly parental attitudes will also be reflected within their children. Parents in the home reveal their feelings toward school to their children.

Sometimes, parents speak openly about their feelings toward school in front of their children. And even if words are not used in communicating feelings and attitudes, the child in the home or school generally is able to understand nonverbal communication.

It should also be pointed out that pupils grouped among the top achievers could develop negative attitudes toward those who achieve less well and have less capacity. In the class setting, teachers need to guide pupils in accepting and respecting others. Respect for others is the heart of democratic thinking.

The Self-Contained Class

Too often, educators have been prone to criticize heavily the more traditional approaches to grouping pupils for instruction, such as the self-contained classroom. Tradition does not in and of itself make a concept or idea bad. There are many traditions in life, which, no doubt, will remain with us forever. However, many customs, beliefs, values, and ideals change due to living in a changing society. Respecting others in the home, school, and community will always be an important ideal to strive toward. Critical thinking, creative thinking, and problem solving, no doubt, also will always remain important skills for individuals to develop.

The self-contained classroom concept is based on the idea that a teacher can get to know pupils well by teaching them for the major part of the school day. Music, art, and physical education could be taught by special teachers. By knowing children well, the teacher should be able to do a good job of providing for individual differences. The teacher can get to know well the child's interests, needs, and abilities in a self-contained class.

Teachers have numerous opportunities to become thoroughly familiar with the home background of each child in a self-contained classroom.

A further advantage of the self-contained class is that teachers can help pupils sense the relationship of knowledge. The teacher, for example, can guide learners to sense that social studies and science are related. In units on air, land, noise, and water pollution, the teacher can guide learners in understanding basic scientific principles and generalizations pertaining to this problem in society. Children could also study the effect that pollution has on man. Thus science and social studies would be emphasized as being related. When a committee of pupils reports findings to the class pertaining to research conducted on pollution, the language arts area of speaking is involved. Thus, a teacher in a self-contained class has many opportunities to guide learners in relating knowledge so that it is not conceived to be in isolation. Too frequently, pupils have felt and thought that knowledge is compartmentalized and cannot be related. In problem solving, knowledge which is related will be used in arriving at solutions. In daily living, it is important to be able to solve problems. Solutions to these problems generally require content which is related. Too often, individuals who compartmentalize knowledge have a difficult time in using what has been learned in the process of problem solving.

Disadvantages of the self-contained classroom can also be listed. A teacher may find it difficult to teach the different curriculum areas well in a self-contained classroom. Can a teacher do justice in teaching reading and the language arts, social studies, science, mathematics, and perhaps, art and physical education? It certainly does require keeping up with the many separate areas that make up the elementary school curriculum. Sometimes a teacher will say that he does not like to teach science or he does not feel competent in teaching science. That curriculum area then may be slighted and minimized by the teacher. There has been a trend in some elementary schools to departmentalize selected curriculum areas on the intermediate grade level. A teacher who has a strong background of course work in science and elementary education could then teach science to several classrooms of pupils. Other teachers could then select curriculum areas to teach in which they have a strong background of course work on the college and/or university level. Teachers should teach the curriculum area or areas in which they have the strongest background knowledge in content as well as in methodology. Elementary school pupils in many cases are aware of strengths and weaknesses that teachers have. It takes good teachers to help pupils achieve to their optimum. Subject matter knowledge of teachers, of course, is not the only important consideration or important factor in teaching. The teacher must like children and have an inward desire in wanting them to achieve to their optimum. The good teacher is respectful of children and shows the necessary patience in working with all learners so they can feel successful in learning.

The self-contained classroom then has its strengths and weaknesses as do all plans in grouping pupils for instruction. Since the self-contained room is a traditional plan for grouping, it has come under considerable criticism. However, one must realize that this plan emphasizes that the teacher should know pupils well by being with a given class for a major part of a school day. Pupils in this plan for grouping can be assisted in relating knowledge. The time allotted to each curriculum area in the self-contained room can be flexible. If the teacher needs more time for teaching mathematics in a given school day, perhaps it is feasible to shorten the time devoted to teaching social studies. On a different day, needed additional time can be given for the teaching of elementary school social studies. In other words in the self-contained classroom, flexibility in scheduling different curriculum areas of the elementary school is possible.

Departmentalization

Departmentalization emphasizes the importance of teachers being well prepared to teach in their area or areas of specialty. Thus, an elementary school teacher, for example, may teach only mathematics or only reading. The teacher in a departmentalized elementary school generally has a strong background of course work in the area he is teaching. For example, a social studies teacher will have much course work in the social sciences together with ample course work in elementary education. The student may have a double major in the two areas previously mentioned, or have a major in elementary education with a minor or an area of concentration in the social sciences. Thus, the teacher should be well prepared in terms of credit hours in a given academic area on the college and/or university level to teach in a departmentalized school. This teacher would generally have fewer daily preparations to make in a departmentalized plan as compared to the self-contained classroom. The teacher in a departmentalized school may teach social studies, for example, to five fifth or sixth grade classes.

Not many elementary schools emphasize departmentalization on the primary grade levels. The subject matter knowledge needed on these grade levels is generally not a major problem; however, it is very important for these teachers to be warm, friendly, understanding, and help each child realize his optimum potential.

It becomes difficult to correlate or integrate different curriculum areas in the elementary school when departmentalization is emphasized strongly. Each curriculum area may become an isolated domain unto itself. Various curriculum areas can be correlated or integrated in a departmentalized plan of grouping if teachers teaching the separate academic areas plan together. They could plan together how science and social studies may be correlated so that pupils sense degrees of relationship between these two curriculum areas. For example, when fifth grade pupils would be studying a unit on the "Age of Discovery" in social studies, they could also be developing science principles and generalizations pertaining to magnetism in a unit on "Magnetism and Electricity." With the use of steel needles and a magnet, pupils could develop resultant magnets by stroking the needles in one direction on the magnet. The magnetized needle could then be placed on a cork which is floating in a pan of water. Pupils could observe the poles of the magnetized needle. Understandings could be developed by learners pertaining to like poles of magnets repel whereas unlike poles attract. The magnetized needle would behave in a similar way in relationship to the north and south magnetic field on the surface of the earth. Compasses became important for sailors during the "Age of Discovery" when new lands and water routes were being explored and discovered.

As a further example, reading and social studies could be correlated in a departmentalized plan of grouping pupils if teachers from these two curriculum areas would plan together. If pupils are studying a unit on "Colonization in the New World" in social studies, the basal reader may have selected stories that relate to that period of time. Thus pupils would have additional opportunities to learn more about the dolonists in Colonial America in the curriculum area of reading and this could be correlated with the related ongoing social studies unit. Ample time would need to be given by teachers for planning from the different curriculum areas being taught in a departmentalized plan of grouping so that subject matter areas or different academic disciples may become related in the thinking of pupils. Correlation for the sake of correlating is to be frowned upon. Correlating and integrating of content are important when it helps pupils to develop interest, purpose, and motivation for learning. Also, pupils should not think in terms of isolated, fragmented knowledge to the point of memorizing unimportant facts for test purposes or under threat from teachers and parents. An excessive number of isolated facts which are learned by pupils make retention of learning a major problem. Generally, pupils will retain learnings longer if knowledge is perceived as being related rather than as isolated, unrelated bits of information.

Homogeneous versus Heterogeneous Grouping

Educators have long debated and discussed the pros and cons of homogeneous versus heterogeneous grouping of pupils. Some have stated that homogeneous grouping is not as democratic as it could be since pupils of a similar level of achievement would be placed in a specific group. For example, the top achievers in mathematics in the sixth grade would be in one room in an elementary school followed by the second best achievers being in a different room. Other levels of mathematics achievement would be in separate rooms with the slowest learners in this curriculum area being grouped in a room by themselves. It has been felt by some educators that pupils need to interact with others regardless of achievement levels. Principals, supervisors, and teachers could provide situations whereby learners work and play together with others regardless of capacity and achievement levels even though homogeneous grouping is emphasized for several curriculum areas. For example, pupils could be grouped heterogeneously in physical education, music, and art. This type of plan for grouping pupils emphasizes heterogeneity in several curriculum areas of the elementary school. For other curriculum areas, homogeneous grouping could be emphasized such as in mathematics, the language arts, social studies, and science.

Teachers may find it easier to teach a given group of learners if homogeneous grouping is in evidence as compared to heterogeneous grouping since the range of achievement will not be as great within a class. However, teachers may not like to teach a class of slow learners as well as those who achieve at a faster rate of speed. The attitude of the teacher, of course, may be reflected within learners. Since the range of achievement in a class may be very great in heterogeneous grouping, it may pose a problem for some teachers in providing for individual differences. In certain methods of teaching it may not matter much if heterogeneous or homogeneous grouping is utilized. For example, in individualized reading, each pupil basically selects his own library book to read. He generally selects a book which is on his reading level. His own reading of the library book will involve a pace which should be in harmony with being able to comprehend the contents adequately. Each pupil in a class will read at a different rate of speed. Also each learner will select a library book which differs in complexity from other library books selected for reading by other children in the classroom. Thus, individual differences can be provided for regardless of capacity and achievement levels of pupils in a class or group. Following the reading of a library book, the teacher may have a conference with the pupil. The teacher can then get data on the learner having comprehended the contents of the library book as well as evaluating pupil interest, enthusiasm, and purpose for reading the book. The teacher can also evaluate the quality of oral reading of the child when the latter reads a section of the library book orally. The teacher can record the results of the conference for future reference. Comparisons can be made of conferences held with each pupil from one time to the next to notice changes in behavior.

In using individualized reading in the classroom, it is obvious that heterogeneous or homogeneous grouping would not be a major problem. It becomes more of a problem when utilizing basal readers if the teacher feels that all learners in a class or in a group should be at the same place at the same time in using a specific series of these readers. It is only common knowledge that learners in a class differ in capacity, achievement, interest, and motivation. Thus, learners in a class cannot be held to the same achievement without detrimental results. For some pupils the expected uniform standards of achievement of traditional teachers will be too difficult where frustration and failure may be the end result. For other learners these standards may be excessively low resulting in boredom and a lack of enthusiasm. The teacher must provide for individual differences regardless of the plan of grouping.

Team Teaching in the Elementary School

A rather recent innovation in grouping pupils for instruction is team teaching. The term "team" implies that teachers work together cooperatively in determining objectives, learning activities, and evaluation techniques when teaching a specific set of learners. Team teaching needs to be differentiated from "turn teaching." In turn teaching, each teacher does his own planning for teaching and then takes his turn teaching pupils either in a large group or small group sessions. Other teachers also take their turn teaching these learners. However, there is little or no interaction among teachers when planning the objectives, learning activities, and evaluation techniques.

Democratic planning is very important when team members work together. Team teaching emphasizes that members learn from each other in planning sessions. Thus, inservice education is an inherent part of team teaching as a plan in grouping pupils for instruction. If a leader or member of a teaching team would be very domineering or autocratic, the chances are that individuals, of course, would not learn from each other. There needs to be mutual respect of personalities and ideas presented when team members select the best objectives, the best learning activities, and the best evaluation techniques to be utilized in teaching a given set of learners.

The talents of each teacher should be utilized when providing learning activities for pupils. For example, when large group instruction is utilized in teaching ninety pupils, each team member's strengths should be analyzed to determine who should do the teaching in the large group session. If pupils are studying a unit on "New England-Past and Present," a team member may have traveled extensively in this area as well as studied its past history thoroughly. This team member may have excellent slides, pictures, filmstrips, and booklets pertaining to the New England area. Thus, large group instruction, no doubt, would heavily involve using the talents of this member of the team.

At other times, different members of the team will be utilizing their talents involving large group instruction in team teaching.

After the large group session has been completed, all teachers on the team should guide learners in small group sessions. Here, learners can ask questions pertaining to the content of learning activities presented in large group instruction. Additional learning activities, carefully selected, can be provided in small group sessions. The teacher needs to select activities which are meaningful, interesting and purposeful to learners. Pupils need to be actively involved in ongoing learning activities. A variety of learning activities should be provided for learners in small group sessions. It should be pointed out that in large group instruction, the teaching team must consider and select those learning activities which capture pupil curiosity and are relevant for learners. If activities are not selected carefully, it will be difficult to hold the attention of pupils and valuable time in learning will be lost.

Ample opportunity also needs to be given to pupils to work on individual projects and activities. With the guidance of the teaching team, pupils should work on purposeful projects and activities on an individual basis which relate to the large and small group sessions.

Team teaching has long emphasized the importance of teachers using their time wisely in what they were trained and educated to do. Thus, teachers should teach and plan for teaching rather than performing routine tasks such as collecting lunch and milk money, putting overshoes on pupils, and keeping attendance records. During the school day, there should be time available for planning. Planning should not be done before the school day begins and after it ends only. In team approach, some planning can, of course, be done, during the school day. For example, a team which teaches only social studies in a school year should have a free period each school day when planning can be done.

There are numerous plans available which emphasize basic principles related to team teaching. In the master teacher plan, a teacher would be designated as the leader of the team with status difference. This individual may also receive more salary than other team members due to having additional responsibilities. The master teacher should have demonstrated teaching proficiency in the curriculum area or areas his team is responsible for. His background of course work on the college and/or university level should be strong relating again to the curriculum area or areas his team assumes responsibility for. The master teacher would then be the leader of the team when planning sessions are conducted. He should be able to work together well with others, particularly, team members. The team approach in planning sessions involves "give" and "take" as far as verbal interaction is concerned. The group rather than the individual determines objectives, learning activities, and evaluation techniques.

Another plan for implementing ideas pertaining to team teaching would involve a team of teachers with no one individual being designated as the leader. Teacher A, for example, would present an idea. This idea could be modified by other team members. Teacher B then could modify, substantiate, or bring in new ideas in the planning session. Each teacher as he or she participates becomes the leader at the time ideas are being presented. In planning sessions, the best of thinking must be emphasized. Each idea must be assessed in terms of its worth and value rather than on who presented the idea or ideas. Selected teachers may feel uncomfortable when their ideas are being evaluated by other teachers in a planning session. A teacher may also feel uncomfortable when teaching in front of other teachers in large group sessions. In other words, team teaching may not be the best approach to use in grouping pupils for instruction as far as all elementary school teachers are concerned. Some teachers, of course, will do a better job of teaching in a self-contained classroom where there is little interaction with other teachers in the school pertaining to actual teaching-learning situations. Team teaching, however, can be very beneficial to many classroom teachers. Team members can learn much from each other in planning sessions if a democratic atmosphere exists. Some teachers are motivated to do a better job of teaching if other teachers are observing them in large group or small group sessions as well as when helping pupils in individual projects. Teachers on teams need to be flexible in their thinking so that ideas can be modified and the best of thinking is then in evidence pertaining to teaching-learning situations. When ideas are constructively criticized in planning sessions, teachers should not be offended at these suggestions. Rather, teachers should perceive this situation as occasions to improve the quality of teaching. Inservice education then becomes a part of the planning sessions.

Grouping Within a Class

To provide for individual differences, pupils should have ample opportunities to work in groups. There should be ample times when pupils may select the group they wish to work in. For example, pupils in a class are studying a unit pertaining to Australia. A committee of pupils could be making a relief map of that country. A second committee may be developing a model sheep and cattle station, while a third committee is gathering information from several sources for a report on manufacturing in Australia. Perhaps, a fourth committee would be involved in dramatizing situations relating to wheat farming in Australia. In teacher-pupil planning sessions, cooperative decisions can be made pertaining to the goals each committee is to realize. Ultimately, each pupil can select the committee he would want to participate in.

There will be times when the teacher may appoint individual pupils to work on different committes. In the example given previously pertaining to committee work in a unit on Australia, the teacher could select pupils to work on each of the committees. For example, pupils who do well in reading content may be placed on the committee doing research on manufacturing in Australia. Other pupils having good eye-hand coordination may be appointed to serve on the committee making the relief map on Australia. In other words, the teacher is placing pupils in committees based on learner capacity, achievement, and interest. All pupils should achieve relevant understandings, skills, and attitudes.

The teacher could use the sociometric device to determine committee members. In using this device to evaluate social and personal growth, the teacher could ask questions of pupils pertaining to the following two areas:

1. If you were doing research on Australia, who would be your first, second, and third choice in selecting committee members to work with you?

2. If you were making a relief map or dramatizing a scene relating to Australia, who would be your first choice, second choice, and third choice, in terms of committee members?

The questions need to be worded on the understanding level of pupils. Pupils must feel confident that the teacher will keep the information obtained strictly confidential. The teacher can use the data to determine committee members. Certainly, pupils will do better work in committees if they can get along well with each other as compared to having a lack of harmony. To be sure, a few learners may feel that being on a committee with friends provides situations where "goofing-off" or "having a picnic" is in order. The teacher needs to develop standards or criteria with pupils when emphasizing committee work so that optimum achievement for all will be in evidence.

It can be excellent if interage grouping is emphasized in the elementary school. In society people of different ages interact with others regardless of age levels. Thus, pupils in an elementary school should have ample opportunities to play and work together regardless of age levels.

Having completed the relief map, the research, the model sheep and cattle station, and having practiced dramatizations pertaining to Australia, pupils from other classes of different age levels can be invited to the classroom to observe the ending or culminating of the social studies unit "Living in Australia." In situations such as these, pupils who are visiting the class which is ending a unit on Australia can learn much content as well as methodology in teaching. Perhaps, the visitors may wish to have similar learning activities in their own classroom. When teachers have ample opportunities to view the teaching procedures used by other professionals, the quality of teaching in many cases should improve.

Criteria for Grouping Pupils

Each elementary school should critically evaluate and develop criteria pertaining to grouping pupils for instruction. Criteria that are developed should harmonize with research findings on child growth and development characteristics. The type or plan of grouping that is implemented in the elementary school should help pupils to achieve to their optimum in intellectual, physical, social, and emotional development. The following questions should be considered when evaluating different plans in grouping pupils for instruction:

1. Does the plan of grouping pupils aid in providing for individual differences within a specific class?

2. Does the plan provide ample opportunities for pupils to engage in committee work?

3. Would pupils achieve agreed upon objectives most effectively when this plan of grouping is used?

4. Do teachers think and feel that the plan for grouping being considered would assist them in doing the best job of teaching?

5. Does the plan for grouping pupils for instruction harmonize with the architecture of the school?

6. Does the elementary school have ample audio-visual aids and other materials for teaching which would harmonize with the plan being considered in grouping pupils for instruction?

7. Do parents and the lay public adequately understand and accept the new plan for grouping before it is implemented?

8. Would the plan harmonize with revised, up-to-date educational objectives of the local elementary school?

9. Would the plan in grouping pupils for instruction harmonize with what is known about child growth and development characteristics?

10. Would the plan harmonize with the concepts and generalizations of a democracy?

11. Could a teacher learn from other professionals in the elementary school when a specific plan of grouping pupils for instruction is utilized?

12. Do pupils have ample opportunities to interact with learners of different capacity and achievement levels as well as with those of similar capacity and achievement?

13. Would pupils have occasions to work with learners of a .younger age level as well as with older children?

14. Would the plan of grouping pupils for instruction provide the child with needed security and status?

Numerous plans exist in grouping pupils for instruction. Each plan has its strengths and weaknesses. Thus, careful evaluation of each plan is important before it is implemented. The nongraded elementary school places primary emphasis upon continuous progress of learners. The self-contained classroom stresses the importance of teachers getting to know pupils well so that this information can be used to do a better job of teaching. Relating of different curriculum areas is also emphasized as being important in the self-contained classroom. The departmentalized elementary school emphasizes the importance of having pupils in a class who are as alike as possible in capacity and achievement. Heterogeneous grouping emphasizes the importance of learners having a variety of capactiy and achievement levels within a specific class. In team teaching, teacher strengths must be utilized in teaching a specific curriculum area, such as social studies, science, mathematics, or reading. This would be true of large group and small group sessions as well as in aiding learners in individual study. In a team approach, members have ample opportunities to learn from each other when planning sessions are in operation to determine objectives, learning activities, and evaluation techniques for a given set of learners. Teachers in a team approach have occasions to observe each other in teaching-learning situations. Within a class setting, the teacher must use a variety of acceptable criteria in grouping pupils for instruction in order to provide for individual differences.